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

Form 10-Q

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

For the quarterly period ended March 31, 2018

or

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

For the transition period from to

Commission File Number: 001-14965

The Goldman Sachs Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware	13-4019460
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
200 West Street, New York, N.Y.	10282
(Address of principal executive offices)	(Zip Code)

(212) 902-1000
(Registrant's telephone number, including area code)

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company) Smaller reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

APPLICABLE ONLY TO CORPORATE ISSUERS

As of April 20, 2018, there were 377,718,087 shares of the registrant's common stock outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Earnings (Unaudited)

	Three Months Ended March	
in millions, except per share amounts	**2018**	2017
Revenues		
Investment banking	**$ 1,793**	$1,703
Investment management	**1,639**	1,397
Commissions and fees	**862**	771
Market making	**3,204**	2,418
Other principal transactions	**1,620**	1,221
Total non-interest revenues	**9,118**	7,510
Interest income	**4,230**	2,746
Interest expense	**3,312**	2,230
Net interest income	**918**	516
Net revenues, including net interest income	**10,036**	8,026
Operating expenses		
Compensation and benefits	**4,115**	3,291
Brokerage, clearing, exchange and distribution fees	**844**	692
Market development	**182**	134
Communications and technology	**251**	223
Depreciation and amortization	**299**	257
Occupancy	**194**	176
Professional fees	**235**	205
Other expenses	**497**	509
Total non-compensation expenses	**2,502**	2,196
Total operating expenses	**6,617**	5,487
Pre-tax earnings	**3,419**	2,539
Provision for taxes	**587**	284
Net earnings	**2,832**	2,255
Preferred stock dividends	**95**	93
Net earnings applicable to common shareholders	**$ 2,737**	$2,162
Earnings per common share		
Basic	**$ 7.02**	$ 5.23
Diluted	**$ 6.95**	$ 5.15
Dividends declared per common share	**$ 0.75**	$ 0.65
Average common shares		
Basic	**389.1**	412.5
Diluted	**393.8**	420.1

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Comprehensive Income (Unaudited)

	Three Months Ended March	
$ in millions	**2018**	2017
Net earnings	**$2,832**	$2,255
Other comprehensive income/(loss) adjustments, net of tax:		
Currency translation	**2**	(16)
Debt valuation adjustment	**270**	(139)
Pension and postretirement liabilities	**(4)**	1
Available-for-sale securities	**(158)**	–
Other comprehensive income/(loss)	**110**	(154)
Comprehensive income	**$2,942**	$2,101

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Financial Condition (Unaudited)

$ in millions	As of March 2018	As of December 2017
Assets		
Cash and cash equivalents	**$120,503**	$110,051
Collateralized agreements:		
Securities purchased under agreements to resell (includes **$131,103** and $120,420 at fair value)	**131,461**	120,822
Securities borrowed (includes **$68,730** and $78,189 at fair value)	**177,567**	190,848
Receivables:		
Brokers, dealers and clearing organizations	**37,746**	24,676
Customers and counterparties (includes **$2,485** and $3,526 at fair value)	**70,273**	60,112
Loans receivable	**71,697**	65,933
Financial instruments owned (at fair value and includes **$61,047** and $50,335 pledged as collateral)	**336,879**	315,988
Other assets	**27,409**	28,346
Total assets	**$973,535**	$916,776
Liabilities and shareholders' equity		
Deposits (includes **$27,537** and $22,902 at fair value)	**$150,940**	$138,604
Collateralized financings:		
Securities sold under agreements to repurchase (at fair value)	**94,690**	84,718
Securities loaned (includes **$5,776** and $5,357 at fair value)	**16,483**	14,793
Other secured financings (includes **$26,666** and $24,345 at fair value)	**26,757**	24,788
Payables:		
Brokers, dealers and clearing organizations	**11,729**	6,672
Customers and counterparties	**179,262**	171,497
Financial instruments sold, but not yet purchased (at fair value)	**124,171**	111,930
Unsecured short-term borrowings (includes **$20,648** and $16,904 at fair value)	**47,760**	46,922
Unsecured long-term borrowings (includes **$40,550** and $38,638 at fair value)	**225,899**	217,687
Other liabilities and accrued expenses (includes **$104** and $268 at fair value)	**12,265**	16,922
Total liabilities	**889,956**	834,533
Commitments, contingencies and guarantees		
Shareholders' equity		
Preferred stock; aggregate liquidation preference of **$11,203** and $11,853	**11,203**	11,853
Common stock; **890,408,670** and 884,592,863 shares issued, and **377,706,096** and 374,808,805 shares outstanding	**9**	9
Share-based awards	**2,415**	2,777
Nonvoting common stock; no shares issued and outstanding	**–**	–
Additional paid-in capital	**53,992**	53,357
Retained earnings	**93,907**	91,519
Accumulated other comprehensive loss	**(1,770)**	(1,880)
Stock held in treasury, at cost; **512,702,576** and 509,784,060 shares	**(76,177)**	(75,392)
Total shareholders' equity	**83,579**	82,243
Total liabilities and shareholders' equity	**$973,535**	$916,776

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Changes in Shareholders' Equity (Unaudited)

$ in millions	**Three Months Ended March 2018**	Year Ended December 2017
Preferred stock		
Beginning balance	**$ 11,853**	$ 11,203
Issued	**–**	1,500
Redeemed	**(650)**	(850)
Ending balance	**11,203**	11,853
Common stock		
Beginning balance	**9**	9
Issued	**–**	–
Ending balance	**9**	9
Share-based awards		
Beginning balance, as previously reported	**2,777**	3,914
Cumulative effect of the change in accounting principle related to forfeiture of share-based awards	**–**	35
Beginning balance, adjusted	**2,777**	3,949
Issuance and amortization of share-based awards	**807**	1,810
Delivery of common stock underlying share-based awards	**(1,145)**	(2,704)
Forfeiture of share-based awards	**(18)**	(89)
Exercise of share-based awards	**(6)**	(189)
Ending balance	**2,415**	2,777
Additional paid-in capital		
Beginning balance	**53,357**	52,638
Delivery of common stock underlying share-based awards	**1,660**	2,934
Cancellation of share-based awards in satisfaction of withholding tax requirements	**(1,040)**	(2,220)
Preferred stock issuance costs, net of reversals upon redemption	**15**	8
Cash settlement of share-based awards	**–**	(3)
Ending balance	**53,992**	53,357
Retained earnings		
Beginning balance, as previously reported	**91,519**	89,039
Cumulative effect of the change in accounting principle related to:		
Revenue recognition from contracts with clients, net of tax	**(53)**	–
Forfeiture of share-based awards, net of tax	**–**	(24)
Beginning balance, adjusted	**91,466**	89,015
Net earnings	**2,832**	4,286
Dividends and dividend equivalents declared on common stock and share-based awards	**(296)**	(1,181)
Dividends declared on preferred stock	**(80)**	(587)
Preferred stock redemption premium	**(15)**	(14)
Ending balance	**93,907**	91,519
Accumulated other comprehensive loss		
Beginning balance	**(1,880)**	(1,216)
Other comprehensive income/(loss)	**110**	(664)
Ending balance	**(1,770)**	(1,880)
Stock held in treasury, at cost		
Beginning balance	**(75,392)**	(68,694)
Repurchased	**(800)**	(6,721)
Reissued	**16**	34
Other	**(1)**	(11)
Ending balance	**(76,177)**	(75,392)
Total shareholders' equity	**$ 83,579**	$ 82,243

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Cash Flows (Unaudited)

	Three Months Ended March	
$ in millions	**2018**	2017
Cash flows from operating activities		
Net earnings	**$ 2,832**	$ 2,255
Adjustments to reconcile net earnings to net cash used for operating activities:		
Depreciation and amortization	**299**	257
Share-based compensation	**1,329**	1,272
Changes in operating assets and liabilities:		
Receivables and payables (excluding loans receivable), net	**(10,479)**	(6,658)
Collateralized transactions (excluding other secured financings), net	**14,304**	15,692
Financial instruments owned (excluding available-for-sale securities)	**(19,708)**	(13,657)
Financial instruments sold, but not yet purchased	**12,165**	(1,216)
Other, net	**(1,706)**	(1,334)
Net cash used for operating activities	**(964)**	(3,389)
Cash flows from investing activities		
Purchase of property, leasehold improvements and equipment	**(1,563)**	(838)
Proceeds from sales of property, leasehold improvements and equipment	**1,007**	77
Net cash used for business acquisitions	**(68)**	(512)
Purchase of investments	**(3,188)**	–
Proceeds from sales and paydowns of investments	**183**	542
Loans receivable, net	**(5,584)**	(816)
Net cash used for investing activities	**(9,213)**	(1,547)
Cash flows from financing activities		
Unsecured short-term borrowings, net	**2,875**	(1,007)
Other secured financings (short-term), net	**2,728**	(1,771)
Proceeds from issuance of other secured financings (long-term)	**1,262**	2,622
Repayment of other secured financings (long-term), including the current portion	**(2,282)**	(1,377)
Purchase of Trust Preferred Securities	**(35)**	–
Proceeds from issuance of unsecured long-term borrowings	**16,029**	19,502
Repayment of unsecured long-term borrowings, including the current portion	**(9,607)**	(13,088)
Derivative contracts with a financing element, net	**189**	912
Deposits, net	**12,336**	3,831
Preferred stock redemption	**(650)**	–
Common stock repurchased	**(800)**	(1,503)
Settlement of share-based awards in satisfaction of withholding tax requirements	**(1,040)**	(1,498)
Dividends and dividend equivalents paid on common stock, preferred stock and share-based awards	**(376)**	(366)
Proceeds from issuance of common stock, including exercise of share-based awards	**–**	6
Cash settlement of share-based awards	**–**	(3)
Net cash provided by financing activities	**20,629**	6,260
Net increase in cash and cash equivalents	**10,452**	1,324
Cash and cash equivalents, beginning balance	**110,051**	121,711
Cash and cash equivalents, ending balance	**$120,503**	$123,035

SUPPLEMENTAL DISCLOSURES:

Cash payments for interest, net of capitalized interest, were $3.55 billion and $2.31 billion, and cash payments for income taxes, net of refunds, were $326 million and $257 million during the three months ended March 2018 and March 2017, respectively. Cash flows related to common stock repurchased includes common stock repurchased in the prior period for which settlement occurred during the current period and excludes common stock repurchased during the current period for which settlement occurred in the following period.

Non-cash activities during the three months ended March 2018:

- The firm received $165 million of loans receivable and $31 million of held-to-maturity securities in connection with the securitization of financial instruments owned and held for sale loans included in receivables from customers and counterparties.
- The firm exchanged $35 million of Trust Preferred Securities and common beneficial interests for $35 million of certain of the firm's junior subordinated debt.

Non-cash activities during the three months ended March 2017:

- The firm received $23 million of loans receivable in connection with the securitization of financial instruments owned.

The accompanying notes are an integral part of these condensed consolidated financial statements.

Note 1.

Description of Business

The Goldman Sachs Group, Inc. (Group Inc. or parent company), a Delaware corporation, together with its consolidated subsidiaries (collectively, the firm), is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. Founded in 1869, the firm is headquartered in New York and maintains offices in all major financial centers around the world.

The firm reports its activities in the following four business segments:

Investment Banking

The firm provides a broad range of investment banking services to a diverse group of corporations, financial institutions, investment funds and governments. Services include strategic advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings, spin-offs and risk management, and debt and equity underwriting of public offerings and private placements, including local and cross-border transactions and acquisition financing, as well as derivative transactions directly related to these activities.

Institutional Client Services

The firm facilitates client transactions and makes markets in fixed income, equity, currency and commodity products, primarily with institutional clients such as corporations, financial institutions, investment funds and governments. The firm also makes markets in and clears client transactions on major stock, options and futures exchanges worldwide and provides financing, securities lending and other prime brokerage services to institutional clients.

Investing & Lending

The firm invests in and originates loans to provide financing to clients. These investments and loans are typically longer-term in nature. The firm makes investments, some of which are consolidated, including through its merchant banking business and its special situations group, in debt securities and loans, public and private equity securities, infrastructure and real estate entities. Some of these investments are made indirectly through funds that the firm manages. The firm also makes unsecured and secured loans to retail clients through its digital platforms, *Marcus: by Goldman Sachs* (Marcus) and *Goldman Sachs Private Bank Select* (GS Select), respectively.

Investment Management

The firm provides investment management services and offers investment products (primarily through separately managed accounts and commingled vehicles, such as mutual funds and private investment funds) across all major asset classes to a diverse set of institutional and individual clients. The firm also offers wealth advisory services provided by the firm's subsidiary, The Ayco Company, L.P., including portfolio management and financial planning and counseling, and brokerage and other transaction services to high-net-worth individuals and families.

Note 2.

Basis of Presentation

These condensed consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and include the accounts of Group Inc. and all other entities in which the firm has a controlling financial interest. Intercompany transactions and balances have been eliminated.

These condensed consolidated financial statements are unaudited and should be read in conjunction with the audited consolidated financial statements included in the firm's Annual Report on Form 10-K for the year ended December 31, 2017. References to "the 2017 Form 10-K" are to the firm's Annual Report on Form 10-K for the year ended December 31, 2017. The condensed consolidated financial information as of December 31, 2017 has been derived from audited consolidated financial statements not included herein.

These unaudited condensed consolidated financial statements reflect all adjustments that are, in the opinion of management, necessary for a fair statement of the results for the interim periods presented. These adjustments are of a normal, recurring nature. Interim period operating results may not be indicative of the operating results for a full year.

All references to March 2018 and March 2017 refer to the firm's periods ended, or the dates, as the context requires, March 31, 2018 and March 31, 2017, respectively. All references to December 2017 refer to the date December 31, 2017. Any reference to a future year refers to a year ending on December 31 of that year. Certain reclassifications have been made to previously reported amounts to conform to the current presentation.

Note 3.

Significant Accounting Policies

The firm's significant accounting policies include when and how to measure the fair value of assets and liabilities, accounting for goodwill and identifiable intangible assets, and when to consolidate an entity. See Notes 5 through 8 for policies on fair value measurements, Note 13 for policies on goodwill and identifiable intangible assets, and below and Note 12 for policies on consolidation accounting. All other significant accounting policies are either described below or included in the following footnotes:

Consolidation

The firm consolidates entities in which the firm has a controlling financial interest. The firm determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity (VIE).

Voting Interest Entities. Voting interest entities are entities in which (i) the total equity investment at risk is sufficient to enable the entity to finance its activities independently and (ii) the equity holders have the power to direct the activities of the entity that most significantly impact its economic performance, the obligation to absorb the losses of the entity and the right to receive the residual returns of the entity. The usual condition for a controlling financial interest in a voting interest entity is ownership of a majority voting interest. If the firm has a controlling majority voting interest in a voting interest entity, the entity is consolidated.

Variable Interest Entities. A VIE is an entity that lacks one or more of the characteristics of a voting interest entity. The firm has a controlling financial interest in a VIE when the firm has a variable interest or interests that provide it with (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. See Note 12 for further information about VIEs.

Equity-Method Investments. When the firm does not have a controlling financial interest in an entity but can exert significant influence over the entity's operating and financial policies, the investment is accounted for either (i) under the equity method of accounting or (ii) at fair value by electing the fair value option available under U.S. GAAP. Significant influence generally exists when the firm owns 20% to 50% of the entity's common stock or in-substance common stock.

In general, the firm accounts for investments acquired after the fair value option became available, at fair value. In certain cases, the firm applies the equity method of accounting to new investments that are strategic in nature or closely related to the firm's principal business activities, when the firm has a significant degree of involvement in the cash flows or operations of the investee or when cost-benefit considerations are less significant. See Note 13 for further information about equity-method investments.

Investment Funds. The firm has formed numerous investment funds with third-party investors. These funds are typically organized as limited partnerships or limited liability companies for which the firm acts as general partner or manager. Generally, the firm does not hold a majority of the economic interests in these funds. These funds are usually voting interest entities and generally are not consolidated because third-party investors typically have rights to terminate the funds or to remove the firm as general partner or manager. Investments in these funds are generally measured at net asset value (NAV) and are included in financial instruments owned. See Notes 6, 18 and 22 for further information about investments in funds.

Use of Estimates

Preparation of these condensed consolidated financial statements requires management to make certain estimates and assumptions, the most important of which relate to fair value measurements, accounting for goodwill and identifiable intangible assets, discretionary compensation accruals, income tax expense related to the Tax Cuts and Jobs Act (Tax Legislation), provisions for losses that may arise from litigation and regulatory proceedings (including governmental investigations), the allowance for losses on loans receivable and lending commitments held for investment, and provisions for losses that may arise from tax audits. These estimates and assumptions are based on the best available information but actual results could be materially different.

Revenue Recognition

Financial Assets and Financial Liabilities at Fair Value. Financial instruments owned and financial instruments sold, but not yet purchased are recorded at fair value either under the fair value option or in accordance with other U.S. GAAP. In addition, the firm has elected to account for certain of its other financial assets and financial liabilities at fair value by electing the fair value option. The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. Fair value gains or losses are generally included in market making for positions in Institutional Client Services and other principal transactions for positions in Investing & Lending. See Notes 5 through 8 for further information about fair value measurements.

Revenue from Contracts with Clients. Beginning in January 2018, the firm accounts for revenue earned from contracts with clients for services such as investment banking, investment management, and execution and clearing (contracts with clients) under ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)." As such, revenues for these services are recognized when the performance obligations related to the underlying transaction are completed. See "Recent Accounting Developments — Revenue from Contracts with Customers (ASC 606)" for further information.

The firm's net revenues from contracts with clients subject to this ASU represent approximately 40% of the firm's total net revenues for the three months ended March 2018. This includes approximately 75% of the firm's investment banking revenues, substantially all of the investment management revenues, and commissions and fees. See Note 25 for information about the firm's net revenues by business segment.

Investment Banking

Advisory. Fees from financial advisory assignments are recognized in revenues when the services related to the underlying transaction are completed under the terms of the assignment. Beginning in January 2018, non-refundable deposits and milestone payments in connection with financial advisory assignments are recognized in revenues upon completion of the underlying transaction or when the assignment is otherwise concluded. Prior to January 2018, non-refundable deposits and milestone payments were recognized in revenues in accordance with the terms of the contract.

Beginning in January 2018, non-compensation expenses associated with financial advisory assignments are recognized when incurred. Client reimbursements for such expenses are included in financial advisory revenues. Prior to January 2018, such expenses were deferred until the related revenue was recognized or the assignment was otherwise concluded and were presented as non-compensation expenses, net of client reimbursements.

Underwriting. Fees from underwriting assignments are recognized in revenues upon completion of the underlying transaction based on the terms of the assignment.

Non-compensation expenses associated with underwriting assignments are deferred until the related revenue is recognized or the assignment is otherwise concluded. Beginning in January 2018, such expenses are presented as non-compensation expenses. Prior to January 2018, such expenses were presented net within underwriting revenues.

Investment Management

The firm earns management fees and incentive fees for investment management services, which are included in investment management revenues. The firm makes payments to brokers and advisors related to the placement of the firm's investment funds (distribution fees), which are included in brokerage, clearing, exchange and distribution fees.

Management Fees. Management fees for mutual funds are calculated as a percentage of daily net asset value and are received monthly. Management fees for hedge funds and separately managed accounts are calculated as a percentage of month-end net asset value and are generally received quarterly. Management fees for private equity funds are calculated as a percentage of monthly invested capital or committed capital and are received quarterly, semi-annually or annually, depending on the fund. Management fees are recognized over time in the period the investment management services are provided.

Distribution fees paid by the firm are calculated based on either a percentage of the management fee, the investment fund's net asset value or the committed capital. Beginning in January 2018, the firm presents such fees in brokerage, clearing, exchange and distribution fees. Prior to January 2018, where the firm was considered an agent to the arrangement, such fees were presented on a net basis in investment management revenues.

Incentive Fees. Incentive fees are calculated as a percentage of a fund's or separately managed account's return, or excess return above a specified benchmark or other performance target. Incentive fees are generally based on investment performance over a 12-month period or over the life of a fund. Fees that are based on performance over a 12-month period are subject to adjustment prior to the end of the measurement period. For fees that are based on investment performance over the life of the fund, future investment underperformance may require fees previously distributed to the firm to be returned to the fund.

Beginning in January 2018, incentive fees earned from a fund or separately managed account are recognized when it is probable that a significant reversal of such fees will not occur, which is generally when such fees are no longer subject to fluctuations in the market value of investments held by the fund or separately managed account. Therefore, incentive fees recognized during the period may relate to performance obligations satisfied in previous periods. Prior to January 2018, incentive fees were recognized only when all material contingencies were resolved.

Commissions and Fees

The firm earns commissions and fees from executing and clearing client transactions on stock, options and futures markets, as well as over-the-counter (OTC) transactions. Commissions and fees are recognized on the day the trade is executed. The firm also provides third-party research services to clients in connection with certain soft-dollar arrangements.

Beginning in January 2018, costs incurred by the firm for research are presented net within commissions and fees. Prior to January 2018, costs incurred by the firm for research for certain soft-dollar arrangements were presented in brokerage, clearing, exchange and distribution fees.

Remaining Performance Obligations

Remaining performance obligations are services that the firm has committed to perform in the future in connection with its contracts with clients. The firm's remaining performance obligations are generally related to its financial advisory assignments and certain investment management activities. Revenues associated with remaining performance obligations relating to financial advisory assignments cannot be determined until the outcome of the transaction. For the firm's investment management activities, where fees are calculated based on the net asset value of the fund or separately managed account, future revenues associated with remaining performance obligations cannot be determined as such fees are subject to fluctuations in the market value of investments held by the fund or separately managed account.

The firm is able to determine the future revenues associated with management fees calculated based on committed capital. As of March 2018, substantially all of the firm's future net revenues associated with remaining performance obligations will be recognized through 2023. Annual revenues associated with such performance obligations average less than $250 million through 2023.

Transfers of Financial Assets

Transfers of financial assets are accounted for as sales when the firm has relinquished control over the assets transferred. For transfers of financial assets accounted for as sales, any gains or losses are recognized in net revenues. Assets or liabilities that arise from the firm's continuing involvement with transferred financial assets are initially recognized at fair value. For transfers of financial assets that are not accounted for as sales, the assets are generally included in financial instruments owned and the transfer is accounted for as a collateralized financing, with the related interest expense recognized over the life of the transaction. See Note 10 for further information about transfers of financial assets accounted for as collateralized financings and Note 11 for further information about transfers of financial assets accounted for as sales.

Cash and Cash Equivalents

The firm defines cash equivalents as highly liquid overnight deposits held in the ordinary course of business. As of March 2018 and December 2017, cash and cash equivalents included $15.53 billion and $10.79 billion, respectively, of cash and due from banks, and $104.97 billion and $99.26 billion, respectively, of interest-bearing deposits with banks. The firm segregates cash for regulatory and other purposes related to client activity. As of March 2018 and December 2017, $24.96 billion and $18.44 billion, respectively, of cash and cash equivalents were segregated for regulatory and other purposes. In addition, the firm segregates securities for regulatory and other purposes related to client activity. See Note 10 for further information about segregated securities.

Receivables from and Payables to Brokers, Dealers and Clearing Organizations

Receivables from and payables to brokers, dealers and clearing organizations are accounted for at cost plus accrued interest, which generally approximates fair value. While these receivables and payables are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these receivables and payables been included in the firm's fair value hierarchy, substantially all would have been classified in level 2 as of both March 2018 and December 2017.

Receivables from Customers and Counterparties

Receivables from customers and counterparties generally relate to collateralized transactions. Such receivables primarily consist of customer margin loans, certain transfers of assets accounted for as secured loans rather than purchases at fair value and collateral posted in connection with certain derivative transactions. Substantially all of these receivables are accounted for at amortized cost net of estimated uncollectible amounts. Certain of the firm's receivables from customers and counterparties are accounted for at fair value under the fair value option, with changes in fair value generally included in market making revenues. See Note 8 for further information about receivables from customers and counterparties accounted for at fair value under the fair value option. In addition, as of March 2018 and December 2017, the firm's receivables from customers and counterparties included $3.65 billion and $4.63 billion, respectively, of loans held for sale, accounted for at the lower of cost or fair value. See Note 5 for an overview of the firm's fair value measurement policies.

As of both March 2018 and December 2017, the carrying value of receivables not accounted for at fair value generally approximated fair value. While these receivables are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these receivables been included in the firm's fair value hierarchy, substantially all would have been classified in level 2 as of both March 2018 and December 2017. Interest on receivables from customers and counterparties is recognized over the life of the transaction and included in interest income.

Receivables from customers and counterparties includes receivables from contracts with clients and, beginning in January 2018, also includes contract assets. Contract assets represent the firm's right to receive consideration for services provided in connection with its contracts with clients for which collection is conditional and not merely subject to the passage of time. As of March 2018, the firm's receivables from contracts with clients were $1.95 billion and contract assets were not material.

Payables to Customers and Counterparties

Payables to customers and counterparties primarily consist of customer credit balances related to the firm's prime brokerage activities. Payables to customers and counterparties are accounted for at cost plus accrued interest, which generally approximates fair value. While these payables are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these payables been included in the firm's fair value hierarchy, substantially all would have been classified in level 2 as of both March 2018 and December 2017. Interest on payables to customers and counterparties is recognized over the life of the transaction and included in interest expense.

Offsetting Assets and Liabilities

To reduce credit exposures on derivatives and securities financing transactions, the firm may enter into master netting agreements or similar arrangements (collectively, netting agreements) with counterparties that permit it to offset receivables and payables with such counterparties. A netting agreement is a contract with a counterparty that permits net settlement of multiple transactions with that counterparty, including upon the exercise of termination rights by a non-defaulting party. Upon exercise of such termination rights, all transactions governed by the netting agreement are terminated and a net settlement amount is calculated. In addition, the firm receives and posts cash and securities collateral with respect to its derivatives and securities financing transactions, subject to the terms of the related credit support agreements or similar arrangements (collectively, credit support agreements). An enforceable credit support agreement grants the non-defaulting party exercising termination rights the right to liquidate the collateral and apply the proceeds to any amounts owed. In order to assess enforceability of the firm's right of setoff under netting and credit support agreements, the firm evaluates various factors including applicable bankruptcy laws, local statutes and regulatory provisions in the jurisdiction of the parties to the agreement.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) in the condensed consolidated statements of financial condition when a legal right of setoff exists under an enforceable netting agreement. Resale and repurchase agreements and securities borrowed and loaned transactions with the same term and currency are presented on a net-by-counterparty basis in the condensed consolidated statements of financial condition when such transactions meet certain settlement criteria and are subject to netting agreements.

In the condensed consolidated statements of financial condition, derivatives are reported net of cash collateral received and posted under enforceable credit support agreements, when transacted under an enforceable netting agreement. In the condensed consolidated statements of financial condition, resale and repurchase agreements, and securities borrowed and loaned, are not reported net of the related cash and securities received or posted as collateral. See Note 10 for further information about collateral received and pledged, including rights to deliver or repledge collateral. See Notes 7 and 10 for further information about offsetting.

Share-based Compensation

The cost of employee services received in exchange for a share-based award is generally measured based on the grant-date fair value of the award. Share-based awards that do not require future service (i.e., vested awards, including awards granted to retirement-eligible employees) are expensed immediately. Share-based awards that require future service are amortized over the relevant service period. Forfeitures are recorded when they occur. See "Recent Accounting Developments — Improvements to Employee Share-Based Payment Accounting (ASC 718)" for further information.

Cash dividend equivalents paid on outstanding restricted stock units (RSUs) are charged to retained earnings. If RSUs that require future service are forfeited, the related dividend equivalents originally charged to retained earnings are reclassified to compensation expense in the period in which forfeiture occurs.

The firm generally issues new shares of common stock upon delivery of share-based awards. In certain cases, primarily related to conflicted employment (as outlined in the applicable award agreements), the firm may cash settle share-based compensation awards accounted for as equity instruments. For these awards, whose terms allow for cash settlement, additional paid-in capital is adjusted to the extent of the difference between the value of the award at the time of cash settlement and the grant-date value of the award.

Foreign Currency Translation

Assets and liabilities denominated in non-U.S. currencies are translated at rates of exchange prevailing on the date of the condensed consolidated statements of financial condition and revenues and expenses are translated at average rates of exchange for the period. Foreign currency remeasurement gains or losses on transactions in nonfunctional currencies are recognized in earnings. Gains or losses on translation of the financial statements of a non-U.S. operation, when the functional currency is other than the U.S. dollar, are included, net of hedges and taxes, in the condensed consolidated statements of comprehensive income.

Recent Accounting Developments

Revenue from Contracts with Customers (ASC 606). In May 2014, the FASB issued ASU No. 2014-09. This ASU, as amended, provides comprehensive guidance on the recognition of revenue earned from contracts with customers arising from the transfer of goods and services, guidance on accounting for certain contract costs and new disclosures.

The firm adopted this ASU in January 2018 under a modified retrospective approach. As a result of adopting this ASU, the firm, among other things, delays recognition of non-refundable and milestone payments on financial advisory assignments until the assignments are completed, and recognizes certain investment management fees earlier than under the firm's previous revenue recognition policies.

The firm also prospectively changed the presentation of certain costs from a net presentation within revenues to a gross basis, and vice versa. Beginning in 2018, certain underwriting expenses, which were netted against investment banking revenues and certain distribution fees, which were netted against investment management revenues, are presented gross as non-compensation expenses. Costs incurred in connection with certain soft-dollar arrangements, which were presented gross as non-compensation expenses, are presented net within commissions and fees.

The cumulative effect of adopting this ASU as of January 1, 2018 was a decrease to retained earnings of $53 million (net of tax). In addition, adoption of this ASU resulted in an increase in both net revenues and non-compensation expenses of approximately $50 million for the three months ended March 2018.

Recognition and Measurement of Financial Assets and Financial Liabilities (ASC 825). In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments (Topic 825) — Recognition and Measurement of Financial Assets and Financial Liabilities." This ASU amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments. It includes a requirement to present separately in other comprehensive income changes in fair value attributable to a firm's own credit spreads (debt valuation adjustment or DVA), net of tax, on financial liabilities for which the fair value option was elected.

In January 2016, the firm early adopted this ASU for the requirements related to DVA and reclassified the cumulative DVA, a gain of $305 million (net of tax), from retained earnings to accumulated other comprehensive loss. The adoption of the remaining provisions of the ASU in January 2018 did not have a material impact on the firm's financial condition, results of operations or cash flows.

Leases (ASC 842). In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)." This ASU requires that, for leases longer than one year, a lessee recognize in the statements of financial condition a right-of-use asset, representing the right to use the underlying asset for the lease term, and a lease liability, representing the liability to make lease payments. It also requires that for finance leases, a lessee recognize interest expense on the lease liability, separately from the amortization of the right-of-use asset in the statements of earnings, while for operating leases, such amounts should be recognized as a combined expense. It also requires that for qualifying sale-leaseback transactions the seller recognize the gain or loss at the time control of the asset is transferred instead of amortizing it over the lease period. In addition, this ASU requires expanded disclosures about the nature and terms of lease agreements.

The ASU is effective for the firm in January 2019 under a modified retrospective approach. Early adoption is permitted. The firm's implementation efforts include reviewing the terms of existing leases and service contracts, which may include embedded leases. Based on the implementation efforts to date, the firm expects a gross up of approximately $2 billion on its consolidated statements of financial condition upon recognition of the right-of-use assets and lease liabilities.

Improvements to Employee Share-Based Payment Accounting (ASC 718). In March 2016, the FASB issued ASU No. 2016-09, "Compensation — Stock Compensation (Topic 718) — Improvements to Employee Share-Based Payment Accounting." This ASU includes a requirement that the tax effect related to the settlement of share-based awards be recorded in income tax benefit or expense in the statements of earnings rather than directly to additional paid-in capital. This change has no impact on total shareholders' equity and is required to be adopted prospectively. The ASU also allows for forfeitures to be recorded when they occur rather than estimated over the vesting period. This change is required to be applied on a modified retrospective basis.

The firm adopted the ASU in January 2017 and subsequent to the adoption, the tax effect related to the settlement of share-based awards is recognized in the statements of earnings rather than directly to additional paid-in capital. The firm also elected to account for forfeitures as they occur, rather than to estimate forfeitures over the vesting period, and the cumulative effect of this election upon adoption was an increase of $35 million to share-based awards and a decrease of $24 million (net of tax of $11 million) to retained earnings.

In addition, the ASU modifies the classification of certain share-based payment activities within the statements of cash flows. Upon adoption, the firm reclassified amounts related to such activities within the condensed consolidated statements of cash flows, on a retrospective basis.

Measurement of Credit Losses on Financial Instruments (ASC 326). In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments — Credit Losses (Topic 326) — Measurement of Credit Losses on Financial Instruments." This ASU amends several aspects of the measurement of credit losses on financial instruments, including replacing the existing incurred credit loss model and other models with the Current Expected Credit Losses (CECL) model and amending certain aspects of accounting for purchased financial assets with deterioration in credit quality since origination.

Under CECL, the allowance for losses for financial assets that are measured at amortized cost reflects management's estimate of credit losses over the remaining expected life of the financial assets. Expected credit losses for newly recognized financial assets, as well as changes to expected credit losses during the period, would be recognized in earnings. For certain purchased financial assets with deterioration in credit quality since origination, an initial allowance would be recorded for expected credit losses and recognized as an increase to the purchase price rather than as an expense. Expected credit losses, including losses on off-balance-sheet exposures such as lending commitments, will be measured based on historical experience, current conditions and forecasts that affect the collectability of the reported amount.

The ASU is effective for the firm in January 2020 under a modified retrospective approach. Early adoption is permitted in January 2019. Adoption of the ASU will result in earlier recognition of credit losses and an increase in the recorded allowance for certain purchased loans with deterioration in credit quality since origination with a corresponding increase to their gross carrying value. The firm is currently in the process of identifying and developing the changes to the firm's existing allowance models and processes that will be required under CECL. The impact of adoption of this ASU on the firm's financial condition, results of operations and cash flows will depend on, among other things, the economic environment and the type of financial assets held by the firm on the date of adoption.

Classification of Certain Cash Receipts and Cash Payments (ASC 230). In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows (Topic 230) — Classification of Certain Cash Receipts and Cash Payments." This ASU provides guidance on the disclosure and classification of certain items within the statements of cash flows.

The firm adopted this ASU in January 2018 under a retrospective approach. The impact of adoption was an increase of $25 million to net cash used for operating activities, a decrease of $26 million to net cash used for investing activities and a decrease of $1 million to net cash provided by financing activities for the three months ended March 2017.

Clarifying the Definition of a Business (ASC 805). In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805) — Clarifying the Definition of a Business." The ASU amends the definition of a business and provides a threshold which must be considered to determine whether a transaction is an acquisition (or disposal) of an asset or a business.

The firm adopted this ASU in January 2018 under a prospective approach. Adoption of the ASU did not have a material impact on the firm's financial condition, results of operations or cash flows. The firm expects that fewer transactions will be treated as acquisitions (or disposals) of businesses as a result of adopting this ASU.

Simplifying the Test for Goodwill Impairment (ASC 350). In January 2017, the FASB issued ASU No. 2017-04, "Intangibles — Goodwill and Other (Topic 350) — Simplifying the Test for Goodwill Impairment." The ASU simplifies the quantitative goodwill impairment test by eliminating the second step of the test. Under this ASU, impairment will be measured by comparing the estimated fair value of the reporting unit with its carrying value.

The ASU is effective for the firm in 2020. The firm early adopted this ASU in the fourth quarter of 2017. Adoption of the ASU did not have a material impact on the results of the firm's goodwill impairment test.

Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets (ASC 610-20). In February 2017, the FASB issued ASU No. 2017-05, "Other Income — Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20) — Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets." The ASU clarifies the scope of guidance applicable to sales of nonfinancial assets and also provides guidance on accounting for partial sales of such assets.

The firm adopted this ASU in January 2018 under a modified retrospective approach. Adoption of the ASU did not have an impact on the firm's financial condition, results of operations or cash flows.

Targeted Improvements to Accounting for Hedging Activities (ASC 815). In August 2017, the FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815) — Targeted Improvements to Accounting for Hedging Activities." The ASU amends certain rules for hedging relationships, expands the types of strategies that are eligible for hedge accounting treatment to more closely align the results of hedge accounting with risk management activities and amends disclosure requirements related to fair value and net investment hedges.

The firm early adopted this ASU in January 2018 under a modified retrospective approach for hedge accounting treatment, and under a prospective approach for the amended disclosure requirements. Adoption of this ASU did not have a material impact on the firm's financial condition, results of operations or cash flows. See Note 7 for further information.

Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (ASC 220). In February 2018, the FASB issued ASU No. 2018-02, "Income Statement — Reporting Comprehensive Income (Topic 220) — Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This ASU permits a reporting entity to reclassify the income tax effects of Tax Legislation on items within accumulated other comprehensive income to retained earnings.

The ASU is effective for the firm in January 2019 under a retrospective or a modified retrospective approach. Early adoption is permitted. Since this ASU only permits reclassification within shareholders' equity, adoption of this ASU will not have a material impact on the firm's financial condition.

Note 4.

Financial Instruments Owned and Financial Instruments Sold, But Not Yet Purchased

Financial instruments owned and financial instruments sold, but not yet purchased are accounted for at fair value either under the fair value option or in accordance with other U.S. GAAP. See Note 8 for information about other financial assets and financial liabilities at fair value.

The table below presents the firm's financial instruments owned and financial instruments sold, but not yet purchased.

$ in millions	Financial Instruments Owned	Financial Instruments Sold, But Not Yet Purchased
As of March 2018		
Money market instruments	**$ 2,181**	**$ –**
Government and agency obligations:		
U.S.	**74,806**	**13,980**
Non-U.S.	**42,053**	**27,228**
Loans and securities backed by:		
Commercial real estate	**3,460**	**1**
Residential real estate	**12,194**	**3**
Corporate debt instruments	**35,228**	**11,753**
State and municipal obligations	**1,760**	**–**
Other debt obligations	**1,872**	**1**
Equity securities	**106,513**	**34,338**
Commodities	**4,723**	**–**
Investments in funds at NAV	**4,043**	**–**
Subtotal	**288,833**	**87,304**
Derivatives	**48,046**	**36,867**
Total	**$336,879**	**$124,171**
As of December 2017		
Money market instruments	$ 1,608	$ –
Government and agency obligations:		
U.S.	76,418	17,911
Non-U.S.	33,956	23,311
Loans and securities backed by:		
Commercial real estate	3,436	1
Residential real estate	11,993	–
Corporate debt instruments	33,683	7,153
State and municipal obligations	1,471	–
Other debt obligations	2,164	1
Equity securities	96,132	23,882
Commodities	3,194	40
Investments in funds at NAV	4,596	–
Subtotal	268,651	72,299
Derivatives	47,337	39,631
Total	$315,988	$111,930

In the table above:

- Money market instruments includes commercial paper, certificates of deposit and time deposits.
- Corporate debt instruments includes corporate loans and debt securities.
- Equity securities includes public and private equities, exchange-traded funds and convertible debentures. Such amounts include investments accounted for at fair value under the fair value option where the firm would otherwise apply the equity method of accounting of $9.44 billion and $8.49 billion as of March 2018 and December 2017, respectively.

Gains and Losses from Market Making and Other Principal Transactions

The table below presents market making revenues by major product type, as well as other principal transactions revenues.

	Three Months Ended March	
$ in millions	**2018**	2017
Interest rates	**$ 905**	$1,364
Credit	**318**	544
Currencies	**402**	(318)
Equities	**1,136**	578
Commodities	**443**	250
Market making	**3,204**	2,418
Other principal transactions	**1,620**	1,221
Total	**$4,824**	$3,639

In the table above:

- Gains/(losses) include both realized and unrealized gains and losses, and are primarily related to the firm's financial instruments owned and financial instruments sold, but not yet purchased, including both derivative and non-derivative financial instruments.
- Gains/(losses) exclude related interest income and interest expense. See Note 23 for further information about interest income and interest expense.
- Gains/(losses) on other principal transactions are included in the firm's Investing & Lending segment. See Note 25 for net revenues, including net interest income, by product type for Investing & Lending, as well as the amount of net interest income included in Investing & Lending.
- Gains/(losses) are not representative of the manner in which the firm manages its business activities because many of the firm's market-making and client facilitation strategies utilize financial instruments across various product types. Accordingly, gains or losses in one product type frequently offset gains or losses in other product types. For example, most of the firm's longer-term derivatives across product types are sensitive to changes in interest rates and may be economically hedged with interest rate swaps. Similarly, a significant portion of the firm's cash instruments and derivatives across product types has exposure to foreign currencies and may be economically hedged with foreign currency contracts.

Note 5.

Fair Value Measurements

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. The firm measures certain financial assets and financial liabilities as a portfolio (i.e., based on its net exposure to market and/or credit risks).

The best evidence of fair value is a quoted price in an active market. If quoted prices in active markets are not available, fair value is determined by reference to prices for similar instruments, quoted prices or recent transactions in less active markets, or internally developed models that primarily use market-based or independently sourced inputs including, but not limited to, interest rates, volatilities, equity or debt prices, foreign exchange rates, commodity prices, credit spreads and funding spreads (i.e., the spread or difference between the interest rate at which a borrower could finance a given financial instrument relative to a benchmark interest rate).

U.S. GAAP has a three-level hierarchy for disclosure of fair value measurements. This hierarchy prioritizes inputs to the valuation techniques used to measure fair value, giving the highest priority to level 1 inputs and the lowest priority to level 3 inputs. A financial instrument's level in this hierarchy is based on the lowest level of input that is significant to its fair value measurement. In evaluating the significance of a valuation input, the firm considers, among other factors, a portfolio's net risk exposure to that input. The fair value hierarchy is as follows:

Level 1. Inputs are unadjusted quoted prices in active markets to which the firm had access at the measurement date for identical, unrestricted assets or liabilities.

Level 2. Inputs to valuation techniques are observable, either directly or indirectly.

Level 3. One or more inputs to valuation techniques are significant and unobservable.

The fair values for substantially all of the firm's financial assets and financial liabilities are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. Certain level 2 and level 3 financial assets and financial liabilities may require appropriate valuation adjustments that a market participant would require to arrive at fair value for factors such as counterparty and the firm's credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads. Valuation adjustments are generally based on market evidence.

See Notes 6 through 8 for further information about fair value measurements of cash instruments, derivatives and other financial assets and financial liabilities at fair value.

The table below presents financial assets and financial liabilities accounted for at fair value under the fair value option or in accordance with other U.S. GAAP.

	As of	
$ in millions	**March 2018**	December 2017
Total level 1 financial assets	**$169,447**	$155,086
Total level 2 financial assets	**404,152**	395,606
Total level 3 financial assets	**21,057**	19,201
Investments in funds at NAV	**4,043**	4,596
Counterparty and cash collateral netting	**(59,502)**	(56,366)
Total financial assets at fair value	**$539,197**	$518,123
Total assets	**$973,535**	$916,776
Total level 3 financial assets divided by:		
Total assets	**2.2%**	2.1%
Total financial assets at fair value	**3.9%**	3.7%
Total level 1 financial liabilities	**$ 73,176**	$ 63,589
Total level 2 financial liabilities	**289,362**	261,719
Total level 3 financial liabilities	**20,256**	19,620
Counterparty and cash collateral netting	**(42,652)**	(39,866)
Total financial liabilities at fair value	**$340,142**	$305,062
Total level 3 financial liabilities divided by total financial liabilities at fair value	**6.0%**	6.4%

In the table above:

- Counterparty netting among positions classified in the same level is included in that level.
- Counterparty and cash collateral netting represents the impact on derivatives of netting across levels of the fair value hierarchy.

The table below presents a summary of level 3 financial assets.

	As of	
$ in millions	March 2018	December 2017
Cash instruments	**$16,942**	$15,395
Derivatives	**4,114**	3,802
Other financial assets	**1**	4
Total	**$21,057**	$19,201

Level 3 financial assets as of March 2018 increased compared with December 2017, primarily reflecting an increase in level 3 cash instruments. See Notes 6 through 8 for further information about level 3 financial assets (including information about unrealized gains and losses related to level 3 financial assets and financial liabilities, and transfers in and out of level 3).

Note 6.

Cash Instruments

Cash instruments include U.S. government and agency obligations, non-U.S. government and agency obligations, mortgage-backed loans and securities, corporate debt instruments, equity securities, investments in funds at NAV, and other non-derivative financial instruments owned and financial instruments sold, but not yet purchased. See below for the types of cash instruments included in each level of the fair value hierarchy and the valuation techniques and significant inputs used to determine their fair values. See Note 5 for an overview of the firm's fair value measurement policies.

Level 1 Cash Instruments

Level 1 cash instruments include certain money market instruments, U.S. government obligations, most non-U.S. government obligations, certain government agency obligations, certain corporate debt instruments and actively traded listed equities. These instruments are valued using quoted prices for identical unrestricted instruments in active markets.

The firm defines active markets for equity instruments based on the average daily trading volume both in absolute terms and relative to the market capitalization for the instrument. The firm defines active markets for debt instruments based on both the average daily trading volume and the number of days with trading activity.

Level 2 Cash Instruments

Level 2 cash instruments include most money market instruments, most government agency obligations, certain non-U.S. government obligations, most mortgage-backed loans and securities, most corporate debt instruments, most state and municipal obligations, most other debt obligations, restricted or less liquid listed equities, commodities and certain lending commitments.

Valuations of level 2 cash instruments can be verified to quoted prices, recent trading activity for identical or similar instruments, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. Consideration is given to the nature of the quotations (e.g., indicative or firm) and the relationship of recent market activity to the prices provided from alternative pricing sources.

Valuation adjustments are typically made to level 2 cash instruments (i) if the cash instrument is subject to transfer restrictions and/or (ii) for other premiums and liquidity discounts that a market participant would require to arrive at fair value. Valuation adjustments are generally based on market evidence.

Level 3 Cash Instruments

Level 3 cash instruments have one or more significant valuation inputs that are not observable. Absent evidence to the contrary, level 3 cash instruments are initially valued at transaction price, which is considered to be the best initial estimate of fair value. Subsequently, the firm uses other methodologies to determine fair value, which vary based on the type of instrument. Valuation inputs and assumptions are changed when corroborated by substantive observable evidence, including values realized on sales of financial assets.

Valuation Techniques and Significant Inputs of Level 3 Cash Instruments

Valuation techniques of level 3 cash instruments vary by instrument, but are generally based on discounted cash flow techniques. The valuation techniques and the nature of significant inputs used to determine the fair values of each type of level 3 cash instrument are described below:

Loans and Securities Backed by Commercial Real Estate. Loans and securities backed by commercial real estate are directly or indirectly collateralized by a single commercial real estate property or a portfolio of properties, and may include tranches of varying levels of subordination. Significant inputs are generally determined based on relative value analyses and include:

- Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral;
- Market yields implied by transactions of similar or related assets and/or current levels and changes in market indices such as the CMBX (an index that tracks the performance of commercial mortgage bonds);
- A measure of expected future cash flows in a default scenario (recovery rates) implied by the value of the underlying collateral, which is mainly driven by current performance of the underlying collateral, capitalization rates and multiples. Recovery rates are expressed as a percentage of notional or face value of the instrument and reflect the benefit of credit enhancements on certain instruments; and
- Timing of expected future cash flows (duration) which, in certain cases, may incorporate the impact of other unobservable inputs (e.g., prepayment speeds).

Loans and Securities Backed by Residential Real Estate. Loans and securities backed by residential real estate are directly or indirectly collateralized by portfolios of residential real estate and may include tranches of varying levels of subordination. Significant inputs are generally determined based on relative value analyses, which incorporate comparisons to instruments with similar collateral and risk profiles. Significant inputs include:

- Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral;
- Market yields implied by transactions of similar or related assets;
- Cumulative loss expectations, driven by default rates, home price projections, residential property liquidation timelines, related costs and subsequent recoveries; and
- Duration, driven by underlying loan prepayment speeds and residential property liquidation timelines.

Corporate Debt Instruments. Significant inputs for corporate debt instruments are generally determined based on relative value analyses, which incorporate comparisons both to prices of credit default swaps that reference the same or similar underlying instrument or entity and to other debt instruments for the same issuer for which observable prices or broker quotations are available. Significant inputs include:

- Market yields implied by transactions of similar or related assets and/or current levels and trends of market indices, such as the CDX (an index that tracks the performance of corporate credit);
- Current performance and recovery assumptions and, where the firm uses credit default swaps to value the related cash instrument, the cost of borrowing the underlying reference obligation; and
- Duration.

Equity Securities. Equity securities includes private equity securities and convertible debentures. Recent third-party completed or pending transactions (e.g., merger proposals, tender offers, debt restructurings) are considered to be the best evidence for any change in fair value. When these are not available, the following valuation methodologies are used, as appropriate:

- Industry multiples (primarily EBITDA multiples) and public comparables;
- Transactions in similar instruments;
- Discounted cash flow techniques; and
- Third-party appraisals.

The firm also considers changes in the outlook for the relevant industry and financial performance of the issuer as compared to projected performance. Significant inputs include:

- Market and transaction multiples;
- Discount rates and capitalization rates; and
- For equity securities with debt-like features, market yields implied by transactions of similar or related assets, current performance and recovery assumptions, and duration.

Other Cash Instruments. Other cash instruments consists of non-U.S. government and agency obligations, state and municipal obligations, and other debt obligations. Significant inputs are generally determined based on relative value analyses, which incorporate comparisons both to prices of credit default swaps that reference the same or similar underlying instrument or entity and to other debt instruments for the same issuer for which observable prices or broker quotations are available. Significant inputs include:

- Market yields implied by transactions of similar or related assets and/or current levels and trends of market indices;
- Current performance and recovery assumptions and, where the firm uses credit default swaps to value the related cash instrument, the cost of borrowing the underlying reference obligation; and
- Duration.

Fair Value of Cash Instruments by Level

The tables below present cash instrument assets and liabilities at fair value by level within the fair value hierarchy.

	As of March 2018			
$ in millions	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Money market instruments	**$ 320**	**$ 1,861**	**$ –**	**$ 2,181**
Government and agency obligations:				
U.S.	**48,245**	**26,561**	**–**	**74,806**
Non-U.S.	**34,270**	**7,777**	**6**	**42,053**
Loans and securities backed by:				
Commercial real estate	**–**	**2,194**	**1,266**	**3,460**
Residential real estate	**–**	**11,521**	**673**	**12,194**
Corporate debt instruments	**883**	**30,987**	**3,358**	**35,228**
State and municipal obligations	**–**	**1,695**	**65**	**1,760**
Other debt obligations	**–**	**1,544**	**328**	**1,872**
Equity securities	**85,700**	**9,567**	**11,246**	**106,513**
Commodities	**–**	**4,723**	**–**	**4,723**
Subtotal	**$169,418**	**$ 98,430**	**$16,942**	**$284,790**
Investments in funds at NAV				**4,043**
Total cash instrument assets				**$288,833**
Liabilities				
Government and agency obligations:				
U.S.	**$ (13,762)**	**$ (218)**	**$ –**	**$ (13,980)**
Non-U.S.	**(25,042)**	**(2,186)**	**–**	**(27,228)**
Loans and securities backed by:				
Commercial real estate	**–**	**(1)**	**–**	**(1)**
Residential real estate	**–**	**(3)**	**–**	**(3)**
Corporate debt instruments	**(15)**	**(11,714)**	**(24)**	**(11,753)**
Other debt obligations	**–**	**(1)**	**–**	**(1)**
Equity securities	**(34,211)**	**(112)**	**(15)**	**(34,338)**
Total cash instrument liabilities	**$ (73,030)**	**$(14,235)**	**$ (39)**	**$ (87,304)**

	As of December 2017			
$ in millions	Level 1	Level 2	Level 3	Total
Assets				
Money market instruments	$ 398	$ 1,209	$ 1	$ 1,608
Government and agency obligations:				
U.S.	50,796	25,622	–	76,418
Non-U.S.	27,070	6,882	4	33,956
Loans and securities backed by:				
Commercial real estate	–	2,310	1,126	3,436
Residential real estate	–	11,325	668	11,993
Corporate debt instruments	752	29,661	3,270	33,683
State and municipal obligations	–	1,401	70	1,471
Other debt obligations	–	1,812	352	2,164
Equity securities	76,044	10,184	9,904	96,132
Commodities	–	3,194	–	3,194
Subtotal	$155,060	$ 93,600	$15,395	$264,055
Investments in funds at NAV				4,596
Total cash instrument assets				$268,651
Liabilities				
Government and agency obligations:				
U.S.	$ (17,845)	$ (66)	$ –	$ (17,911)
Non-U.S.	(21,820)	(1,491)	–	(23,311)
Loans and securities backed by commercial real estate	–	(1)	–	(1)
Corporate debt instruments	(2)	(7,099)	(52)	(7,153)
Other debt obligations	–	(1)	–	(1)
Equity securities	(23,866)	–	(16)	(23,882)
Commodities	–	(40)	–	(40)
Total cash instrument liabilities	$ (63,533)	$ (8,698)	$ (68)	$ (72,299)

In the tables above:

- Cash instrument assets and liabilities are included in financial instruments owned and financial instruments sold, but not yet purchased, respectively.
- Cash instrument assets are shown as positive amounts and cash instrument liabilities are shown as negative amounts.
- Money market instruments includes commercial paper, certificates of deposit and time deposits, substantially all of which have a maturity of less than one year.
- Corporate debt instruments includes corporate loans and debt securities.
- Equity securities includes public and private equities, exchange-traded funds and convertible debentures.
- As of both March 2018 and December 2017, substantially all of the firm's level 3 equity securities consisted of private equity securities.
- Total cash instrument assets included collateralized loan obligations backed by corporate obligations of $740 million and $912 million in level 2, and $222 million and $166 million in level 3 as of March 2018 and December 2017, respectively. Collateralized debt obligations (CDOs) included in cash instruments were not material as of both March 2018 and December 2017.

Significant Unobservable Inputs

The table below presents the amount of level 3 assets, and ranges and weighted averages of significant unobservable inputs used to value the firm's level 3 cash instruments.

	Level 3 Assets and Range of Significant Unobservable Inputs (Weighted Average) as of	
$ in millions	**March 2018**	December 2017
Loans and securities backed by commercial real estate		
Level 3 assets	**$1,266**	$1,126
Yield	**6.0% to 23.6% (13.2%)**	4.6% to 22.0% (13.4%)
Recovery rate	**12.3% to 92.9% (49.2%)**	14.3% to 89.0% (43.8%)
Duration (years)	**0.5 to 6.3 (2.0)**	0.8 to 6.4 (2.1)
Loans and securities backed by residential real estate		
Level 3 assets	**$673**	$668
Yield	**2.4% to 18.7% (9.3%)**	2.3% to 15.0% (8.3%)
Cumulative loss rate	**12.2% to 43.1% (21.5%)**	12.5% to 43.0% (21.8%)
Duration (years)	**0.5 to 15.7 (6.3)**	0.7 to 14.0 (6.9)
Corporate debt instruments		
Level 3 assets	**$3,358**	$3,270
Yield	**4.1% to 26.0% (13.2%)**	3.6% to 24.5% (12.3%)
Recovery rate	**0.0% to 85.0% (57.4%)**	0.0% to 85.3% (62.8%)
Duration (years)	**0.3 to 5.6 (3.1)**	0.5 to 7.6 (3.2)
Equity securities		
Level 3 assets	**$11,246**	$9,904
Multiples	**1.1x to 37.0x (8.7x)**	1.1x to 30.5x (8.9x)
Discount rate/yield	**3.0% to 25.0% (14.7%)**	3.0% to 20.3% (14.0%)
Capitalization rate	**4.3% to 12.9% (5.9%)**	4.3% to 12.0% (6.1%)
Other cash instruments		
Level 3 assets	**$399**	$427
Yield	**4.1% to 11.8% (8.8%)**	4.0% to 11.7% (8.4%)
Duration (years)	**3.3 to 8.7 (4.4)**	3.5 to 11.4 (5.1)

In the table above:

- Ranges represent the significant unobservable inputs that were used in the valuation of each type of cash instrument.
- Weighted averages are calculated by weighting each input by the relative fair value of the cash instruments.
- The ranges and weighted averages of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one cash instrument. For example, the highest multiple for private equity securities is appropriate for valuing a specific private equity security but may not be appropriate for valuing any other private equity security. Accordingly, the ranges of inputs do not represent uncertainty in, or possible ranges of, fair value measurements of the firm's level 3 cash instruments.
- Increases in yield, discount rate, capitalization rate, duration or cumulative loss rate used in the valuation of the firm's level 3 cash instruments would result in a lower fair value measurement, while increases in recovery rate or multiples would result in a higher fair value measurement. Due to the distinctive nature of each of the firm's level 3 cash instruments, the interrelationship of inputs is not necessarily uniform within each product type.
- Loans and securities backed by commercial and residential real estate, corporate debt instruments and other cash instruments are valued using discounted cash flows, and equity securities are valued using market comparables and discounted cash flows.
- The fair value of any one instrument may be determined using multiple valuation techniques. For example, market comparables and discounted cash flows may be used together to determine fair value. Therefore, the level 3 balance encompasses both of these techniques.

Transfers Between Levels of the Fair Value Hierarchy

Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. See "Level 3 Rollforward" below for information about transfers between level 2 and level 3.

During the three months ended March 2018, transfers into level 2 from level 1 of cash instruments were $13 million, reflecting transfers of public equity securities due to decreased market activity in these instruments. Transfers into level 1 from level 2 of cash instruments were $41 million, reflecting transfers of public equity securities due to increased market activity in these instruments.

During the three months ended March 2017, transfers into level 2 from level 1 of cash instruments were $182 million, reflecting transfers of public equity securities due to decreased market activity in these instruments. Transfers into level 1 from level 2 of cash instruments were $33 million, reflecting transfers of public equity securities due to increased market activity in these instruments.

Level 3 Rollforward

The table below presents a summary of the changes in fair value for level 3 cash instrument assets and liabilities.

	Three Months Ended March	
$ in millions	**2018**	2017
Total cash instrument assets		
Beginning balance	**$15,395**	$18,035
Net realized gains/(losses)	**122**	131
Net unrealized gains/(losses)	**564**	402
Purchases	**549**	683
Sales	**(213)**	(687)
Settlements	**(722)**	(716)
Transfers into level 3	**1,942**	1,605
Transfers out of level 3	**(695)**	(1,129)
Ending balance	**$16,942**	$18,324
Total cash instrument liabilities		
Beginning balance	**$ (68)**	$ (62)
Net realized gains/(losses)	**2**	–
Net unrealized gains/(losses)	**7**	4
Purchases	**15**	36
Sales	**(13)**	(28)
Settlements	**23**	(2)
Transfers into level 3	**(9)**	(2)
Transfers out of level 3	**4**	5
Ending balance	**$ (39)**	$ (49)

In the table above:

- Changes in fair value are presented for all cash instrument assets and liabilities that are classified in level 3 as of the end of the period.
- Net unrealized gains/(losses) relates to instruments that were still held at period-end.
- Purchases includes originations and secondary purchases.
- If a cash instrument asset or liability was transferred to level 3 during a reporting period, its entire gain or loss for the period is classified in level 3.
- For level 3 cash instrument assets, increases are shown as positive amounts, while decreases are shown as negative amounts. For level 3 cash instrument liabilities, increases are shown as negative amounts, while decreases are shown as positive amounts.
- Level 3 cash instruments are frequently economically hedged with level 1 and level 2 cash instruments and/or level 1, level 2 or level 3 derivatives. Accordingly, gains or losses that are classified in level 3 can be partially offset by gains or losses attributable to level 1 or level 2 cash instruments and/or level 1, level 2 or level 3 derivatives. As a result, gains or losses included in the level 3 rollforward below do not necessarily represent the overall impact on the firm's results of operations, liquidity or capital resources.

The table below disaggregates, by product type, the information for cash instrument assets included in the summary table above.

	Three Months Ended March	
$ in millions	**2018**	2017
Loans and securities backed by commercial real estate		
Beginning balance	**$ 1,126**	$ 1,645
Net realized gains/(losses)	**11**	16
Net unrealized gains/(losses)	**23**	51
Purchases	**41**	47
Sales	**(4)**	(55)
Settlements	**(78)**	(130)
Transfers into level 3	**231**	147
Transfers out of level 3	**(84)**	(117)
Ending balance	**$ 1,266**	$ 1,604
Loans and securities backed by residential real estate		
Beginning balance	**$ 668**	$ 845
Net realized gains/(losses)	**15**	9
Net unrealized gains/(losses)	**14**	35
Purchases	**35**	149
Sales	**(60)**	(156)
Settlements	**(29)**	(49)
Transfers into level 3	**34**	39
Transfers out of level 3	**(4)**	(42)
Ending balance	**$ 673**	$ 830
Corporate debt instruments		
Beginning balance	**$ 3,270**	$ 4,640
Net realized gains/(losses)	**48**	66
Net unrealized gains/(losses)	**74**	69
Purchases	**141**	306
Sales	**(92)**	(375)
Settlements	**(346)**	(330)
Transfers into level 3	**460**	762
Transfers out of level 3	**(197)**	(585)
Ending balance	**$ 3,358**	$ 4,553
Equity securities		
Beginning balance	**$ 9,904**	$10,263
Net realized gains/(losses)	**44**	29
Net unrealized gains/(losses)	**453**	252
Purchases	**314**	103
Sales	**(36)**	(56)
Settlements	**(239)**	(142)
Transfers into level 3	**1,205**	616
Transfers out of level 3	**(399)**	(350)
Ending balance	**$11,246**	$10,715
Other cash instruments		
Beginning balance	**$ 427**	$ 642
Net realized gains/(losses)	**4**	11
Net unrealized gains/(losses)	**–**	(5)
Purchases	**18**	78
Sales	**(21)**	(45)
Settlements	**(30)**	(65)
Transfers into level 3	**12**	41
Transfers out of level 3	**(11)**	(35)
Ending balance	**$ 399**	$ 622

Level 3 Rollforward Commentary

Three Months Ended March 2018. The net realized and unrealized gains on level 3 cash instrument assets of $686 million (reflecting $122 million of net realized gains and $564 million of net unrealized gains) for the three months ended March 2018 included gains/(losses) of approximately $(2) million, $597 million and $91 million reported in market making, other principal transactions and interest income, respectively.

The net unrealized gains on level 3 cash instrument assets for the three months ended March 2018 primarily reflected gains on private equity securities, principally driven by strong corporate performance and company-specific events.

Transfers into level 3 during the three months ended March 2018 primarily reflected transfers of certain private equity securities and corporate debt instruments from level 2, principally due to reduced price transparency as a result of a lack of market evidence, including fewer market transactions in these instruments.

Transfers out of level 3 during the three months ended March 2018 primarily reflected transfers of certain private equity securities and corporate debt instruments to level 2, principally due to increased price transparency as a result of market evidence, including market transactions in these instruments, and transfers of certain other corporate debt instruments to level 2, principally due to certain unobservable yield and duration inputs no longer being significant to the valuation of these instruments.

Three Months Ended March 2017. The net realized and unrealized gains on level 3 cash instrument assets of $533 million (reflecting $131 million of net realized gains and $402 million of net unrealized gains) for the three months ended March 2017 included gains/(losses) of approximately $(10) million, $396 million and $147 million reported in market making, other principal transactions and interest income, respectively.

The net unrealized gains on level 3 cash instrument assets for the three months ended March 2017 primarily reflected gains on private equity securities, principally driven by strong corporate performance and company-specific events.

Transfers into level 3 during the three months ended March 2017 primarily reflected transfers of certain corporate debt instruments and private equity securities from level 2, principally due to reduced price transparency as a result of a lack of market evidence, including fewer market transactions in these instruments.

Transfers out of level 3 during the three months ended March 2017 primarily reflected transfers of certain corporate debt instruments to level 2, principally due to certain unobservable yield and duration inputs no longer being significant to the valuation of these instruments and certain private equity securities to level 2, principally due to increased price transparency as a result of market evidence, including transactions in these instruments.

Available-for-Sale Securities

The table below presents details about cash instruments that are accounted for as available-for-sale.

$ in millions	Amortized Cost	Fair Value	Weighted Average Yield
As of March 2018			
Less than 5 years	**$ 5,976**	**$ 5,871**	**2.10%**
Greater than 5 years	**6,255**	**6,131**	**2.44%**
Total U.S. government obligations	**12,231**	**12,002**	**2.28%**
Greater than 5 years	**109**	**111**	**5.26%**
Total other available-for-sale securities	**109**	**111**	**5.26%**
Total available-for-sale securities	**$12,340**	**$12,113**	**2.30%**
As of December 2017			
Less than 5 years	$ 3,834	$ 3,800	1.95%
Greater than 5 years	5,207	5,222	2.41%
Total U.S. government obligations	9,041	9,022	2.22%
Less than 5 years	19	19	0.43%
Greater than 5 years	233	235	4.62%
Total other available-for-sale securities	252	254	4.30%
Total available-for-sale securities	$ 9,293	$ 9,276	2.27%

In the table above:

- U.S. government obligations were classified in level 1 of the fair value hierarchy as of both March 2018 and December 2017.
- Other available-for-sale securities includes corporate debt securities and other debt obligations that were classified in level 2 of the fair value hierarchy as of March 2018. As of December 2017, other available-for-sale securities includes corporate debt securities, other debt obligations, securities backed by commercial real estate and money market instruments, substantially all of which were classified in level 2 of the fair value hierarchy.
- The gross unrealized losses included in accumulated other comprehensive loss were $229 million as of March 2018 and related to U.S. government obligations, which were in a continuous unrealized loss position for less than a year. Such losses were not material as of December 2017.

Investments in Funds at Net Asset Value Per Share

Cash instruments at fair value include investments in funds that are measured at NAV of the investment fund. The firm uses NAV to measure the fair value of its fund investments when (i) the fund investment does not have a readily determinable fair value and (ii) the NAV of the investment fund is calculated in a manner consistent with the measurement principles of investment company accounting, including measurement of the investments at fair value.

Substantially all of the firm's investments in funds at NAV consist of investments in firm-sponsored private equity, credit, real estate and hedge funds where the firm co-invests with third-party investors.

Private equity funds primarily invest in a broad range of industries worldwide, including leveraged buyouts, recapitalizations, growth investments and distressed investments. Credit funds generally invest in loans and other fixed income instruments and are focused on providing private high-yield capital for leveraged and management buyout transactions, recapitalizations, financings, refinancings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers. Real estate funds invest globally, primarily in real estate companies, loan portfolios, debt recapitalizations and property. Private equity, credit and real estate funds are closed-end funds in which the firm's investments are generally not eligible for redemption. Distributions will be received from these funds as the underlying assets are liquidated or distributed.

The firm also invests in hedge funds, primarily multi-disciplinary hedge funds that employ a fundamental bottom-up investment approach across various asset classes and strategies. The firm's investments in hedge funds primarily include interests where the underlying assets are illiquid in nature, and proceeds from redemptions will not be received until the underlying assets are liquidated or distributed.

Many of the funds described above are "covered funds" as defined in the Volcker Rule of the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). The Board of Governors of the Federal Reserve System (Federal Reserve Board or FRB) extended the conformance period to July 2022 for the firm's investments in, and relationships with, certain legacy "illiquid funds" (as defined in the Volcker Rule) that were in place prior to December 2013. This extension is applicable to substantially all of the firm's remaining investments in, and relationships with, covered funds in the table below.

The table below presents the fair value of the firm's investments in funds at NAV and related unfunded commitments.

$ in millions	Fair Value of Investments	Unfunded Commitments
As of March 2018		
Private equity funds	**$2,933**	**$ 610**
Credit funds	**301**	**957**
Hedge funds	**208**	**–**
Real estate funds	**601**	**201**
Total	**$4,043**	**$1,768**
As of December 2017		
Private equity funds	$3,478	$ 614
Credit funds	266	985
Hedge funds	223	–
Real estate funds	629	201
Total	$4,596	$1,800

Note 7.
Derivatives and Hedging Activities

Derivative Activities

Derivatives are instruments that derive their value from underlying asset prices, indices, reference rates and other inputs, or a combination of these factors. Derivatives may be traded on an exchange (exchange-traded) or they may be privately negotiated contracts, which are usually referred to as OTC derivatives. Certain of the firm's OTC derivatives are cleared and settled through central clearing counterparties (OTC-cleared), while others are bilateral contracts between two counterparties (bilateral OTC).

Market Making. As a market maker, the firm enters into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. In this role, the firm typically acts as principal and is required to commit capital to provide execution, and maintains inventory in response to, or in anticipation of, client demand.

Risk Management. The firm also enters into derivatives to actively manage risk exposures that arise from its market-making and investing and lending activities in derivative and cash instruments. The firm's holdings and exposures are hedged, in many cases, on either a portfolio or risk-specific basis, as opposed to an instrument-by-instrument basis. The offsetting impact of this economic hedging is reflected in the same business segment as the related revenues. In addition, the firm may enter into derivatives designated as hedges under U.S. GAAP. These derivatives are used to manage interest rate exposure in certain fixed-rate unsecured long-term and short-term borrowings, and deposits, and to manage foreign currency exposure on the net investment in certain non-U.S. operations.

The firm enters into various types of derivatives, including:

- **Futures and Forwards.** Contracts that commit counterparties to purchase or sell financial instruments, commodities or currencies in the future.
- **Swaps.** Contracts that require counterparties to exchange cash flows such as currency or interest payment streams. The amounts exchanged are based on the specific terms of the contract with reference to specified rates, financial instruments, commodities, currencies or indices.
- **Options.** Contracts in which the option purchaser has the right, but not the obligation, to purchase from or sell to the option writer financial instruments, commodities or currencies within a defined time period for a specified price.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) when a legal right of setoff exists under an enforceable netting agreement (counterparty netting). Derivatives are accounted for at fair value, net of cash collateral received or posted under enforceable credit support agreements (cash collateral netting). Derivative assets and liabilities are included in financial instruments owned and financial instruments sold, but not yet purchased, respectively. Realized and unrealized gains and losses on derivatives not designated as hedges under ASC 815 are included in market making and other principal transactions in Note 4.

The tables below present the gross fair value and the notional amounts of derivative contracts by major product type, the amounts of counterparty and cash collateral netting in the condensed consolidated statements of financial condition, as well as cash and securities collateral posted and received under enforceable credit support agreements that do not meet the criteria for netting under U.S. GAAP.

	As of March 2018		As of December 2017	
$ in millions	**Derivative Assets**	**Derivative Liabilities**	Derivative Assets	Derivative Liabilities
Not accounted for as hedges				
Exchange-traded	**$ 1,155**	**$ 1,076**	$ 554	$ 644
OTC-cleared	**6,190**	**3,273**	5,392	2,773
Bilateral OTC	**269,170**	**245,084**	274,986	249,750
Total interest rates	**276,515**	**249,433**	280,932	253,167
OTC-cleared	**6,067**	**5,768**	5,727	5,670
Bilateral OTC	**16,328**	**14,923**	16,966	15,600
Total credit	**22,395**	**20,691**	22,693	21,270
Exchange-traded	**19**	**26**	23	363
OTC-cleared	**761**	**604**	988	847
Bilateral OTC	**87,374**	**85,424**	94,481	95,127
Total currencies	**88,154**	**86,054**	95,492	96,337
Exchange-traded	**3,637**	**3,626**	4,135	3,854
OTC-cleared	**323**	**319**	197	197
Bilateral OTC	**9,504**	**11,254**	9,748	12,097
Total commodities	**13,464**	**15,199**	14,080	16,148
Exchange-traded	**10,977**	**10,795**	10,552	10,335
Bilateral OTC	**42,059**	**45,205**	40,735	45,253
Total equities	**53,036**	**56,000**	51,287	55,588
Subtotal	**453,564**	**427,377**	464,484	442,510
Accounted for as hedges				
OTC-cleared	**21**	**–**	21	–
Bilateral OTC	**1,823**	**3**	2,309	3
Total interest rates	**1,844**	**3**	2,330	3
OTC-cleared	**23**	**38**	15	30
Bilateral OTC	**69**	**53**	34	114
Total currencies	**92**	**91**	49	144
Subtotal	**1,936**	**94**	2,379	147
Total gross fair value	**$ 455,500**	**$ 427,471**	$ 466,863	$ 442,657
Offset in condensed consolidated statements of financial condition				
Exchange-traded	**$ (12,990)**	**$ (12,990)**	$ (12,963)	$ (12,963)
OTC-cleared	**(9,799)**	**(9,799)**	(9,267)	(9,267)
Bilateral OTC	**(326,057)**	**(326,057)**	(341,824)	(341,824)
Counterparty netting	**(348,846)**	**(348,846)**	(364,054)	(364,054)
OTC-cleared	**(2,640)**	**(73)**	(2,423)	(180)
Bilateral OTC	**(55,968)**	**(41,685)**	(53,049)	(38,792)
Cash collateral netting	**(58,608)**	**(41,758)**	(55,472)	(38,972)
Total amounts offset	**$(407,454)**	**$(390,604)**	$(419,526)	$(403,026)
Included in condensed consolidated statements of financial condition				
Exchange-traded	**$ 2,798**	**$ 2,533**	$ 2,301	$ 2,233
OTC-cleared	**946**	**130**	650	70
Bilateral OTC	**44,302**	**34,204**	44,386	37,328
Total	**$ 48,046**	**$ 36,867**	$ 47,337	$ 39,631
Not offset in condensed consolidated statements of financial condition				
Cash collateral	**$ (603)**	**$ (1,297)**	$ (602)	$ (2,375)
Securities collateral	**(14,467)**	**(8,480)**	(13,947)	(8,722)
Total	**$ 32,976**	**$ 27,090**	$ 32,788	$ 28,534

$ in millions	Notional Amounts as of March 2018	December 2017
Not accounted for as hedges		
Exchange-traded	**$15,059,754**	$10,212,510
OTC-cleared	**17,707,175**	14,739,556
Bilateral OTC	**15,306,289**	12,862,328
Total interest rates	**48,073,218**	37,814,394
OTC-cleared	**418,735**	386,163
Bilateral OTC	**871,616**	868,226
Total credit	**1,290,351**	1,254,389
Exchange-traded	**8,453**	10,450
OTC-cleared	**106,175**	98,549
Bilateral OTC	**7,577,689**	7,331,516
Total currencies	**7,692,317**	7,440,515
Exchange-traded	**260,059**	239,749
OTC-cleared	**3,504**	3,925
Bilateral OTC	**264,550**	250,547
Total commodities	**528,113**	494,221
Exchange-traded	**715,251**	655,485
Bilateral OTC	**1,173,206**	1,127,812
Total equities	**1,888,457**	1,783,297
Subtotal	**59,472,456**	48,786,816
Accounted for as hedges		
OTC-cleared	**65,600**	52,785
Bilateral OTC	**12,252**	15,188
Total interest rates	**77,852**	67,973
OTC-cleared	**3,542**	2,210
Bilateral OTC	**7,621**	8,347
Total currencies	**11,163**	10,557
Subtotal	**89,015**	78,530
Total notional amounts	**$59,561,471**	$48,865,346

In the tables above:

- Gross fair values exclude the effects of both counterparty netting and collateral, and therefore are not representative of the firm's exposure.
- Where the firm has received or posted collateral under credit support agreements, but has not yet determined such agreements are enforceable, the related collateral has not been netted.
- Notional amounts, which represent the sum of gross long and short derivative contracts, provide an indication of the volume of the firm's derivative activity and do not represent anticipated losses.
- Total gross fair value of derivatives included derivative assets and derivative liabilities of $9.94 billion and $12.58 billion, respectively, as of March 2018, and $11.24 billion and $13.00 billion, respectively, as of December 2017, which are not subject to an enforceable netting agreement or are subject to a netting agreement that the firm has not yet determined to be enforceable.

Valuation Techniques for Derivatives

The firm's level 2 and level 3 derivatives are valued using derivative pricing models (e.g., discounted cash flow models, correlation models, and models that incorporate option pricing methodologies, such as Monte Carlo simulations). Price transparency of derivatives can generally be characterized by product type, as described below.

- **Interest Rate.** In general, the key inputs used to value interest rate derivatives are transparent, even for most long-dated contracts. Interest rate swaps and options denominated in the currencies of leading industrialized nations are characterized by high trading volumes and tight bid/offer spreads. Interest rate derivatives that reference indices, such as an inflation index, or the shape of the yield curve (e.g., 10-year swap rate vs. 2-year swap rate) are more complex, but the key inputs are generally observable.
- **Credit.** Price transparency for credit default swaps, including both single names and baskets of credits, varies by market and underlying reference entity or obligation. Credit default swaps that reference indices, large corporates and major sovereigns generally exhibit the most price transparency. For credit default swaps with other underliers, price transparency varies based on credit rating, the cost of borrowing the underlying reference obligations, and the availability of the underlying reference obligations for delivery upon the default of the issuer. Credit default swaps that reference loans, asset-backed securities and emerging market debt instruments tend to have less price transparency than those that reference corporate bonds. In addition, more complex credit derivatives, such as those sensitive to the correlation between two or more underlying reference obligations, generally have less price transparency.

- **Currency.** Prices for currency derivatives based on the exchange rates of leading industrialized nations, including those with longer tenors, are generally transparent. The primary difference between the price transparency of developed and emerging market currency derivatives is that emerging markets tend to be observable for contracts with shorter tenors.

- **Commodity.** Commodity derivatives include transactions referenced to energy (e.g., oil and natural gas), metals (e.g., precious and base) and soft commodities (e.g., agricultural). Price transparency varies based on the underlying commodity, delivery location, tenor and product quality (e.g., diesel fuel compared to unleaded gasoline). In general, price transparency for commodity derivatives is greater for contracts with shorter tenors and contracts that are more closely aligned with major and/or benchmark commodity indices.

- **Equity.** Price transparency for equity derivatives varies by market and underlier. Options on indices and the common stock of corporates included in major equity indices exhibit the most price transparency. Equity derivatives generally have observable market prices, except for contracts with long tenors or reference prices that differ significantly from current market prices. More complex equity derivatives, such as those sensitive to the correlation between two or more individual stocks, generally have less price transparency.

Liquidity is essential to observability of all product types. If transaction volumes decline, previously transparent prices and other inputs may become unobservable. Conversely, even highly structured products may at times have trading volumes large enough to provide observability of prices and other inputs. See Note 5 for an overview of the firm's fair value measurement policies.

Level 1 Derivatives

Level 1 derivatives include short-term contracts for future delivery of securities when the underlying security is a level 1 instrument, and exchange-traded derivatives if they are actively traded and are valued at their quoted market price.

Level 2 Derivatives

Level 2 derivatives include OTC derivatives for which all significant valuation inputs are corroborated by market evidence and exchange-traded derivatives that are not actively traded and/or that are valued using models that calibrate to market-clearing levels of OTC derivatives.

The selection of a particular model to value a derivative depends on the contractual terms of and specific risks inherent in the instrument, as well as the availability of pricing information in the market. For derivatives that trade in liquid markets, model selection does not involve significant management judgment because outputs of models can be calibrated to market-clearing levels.

Valuation models require a variety of inputs, such as contractual terms, market prices, yield curves, discount rates (including those derived from interest rates on collateral received and posted as specified in credit support agreements for collateralized derivatives), credit curves, measures of volatility, prepayment rates, loss severity rates and correlations of such inputs. Significant inputs to the valuations of level 2 derivatives can be verified to market transactions, broker or dealer quotations or other alternative pricing sources with reasonable levels of price transparency. Consideration is given to the nature of the quotations (e.g., indicative or firm) and the relationship of recent market activity to the prices provided from alternative pricing sources.

Level 3 Derivatives

Level 3 derivatives are valued using models which utilize observable level 1 and/or level 2 inputs, as well as unobservable level 3 inputs. The significant unobservable inputs used to value the firm's level 3 derivatives are described below.

- For level 3 interest rate and currency derivatives, significant unobservable inputs include correlations of certain currencies and interest rates (e.g., the correlation between Euro inflation and Euro interest rates). In addition, for level 3 interest rate derivatives, significant unobservable inputs include specific interest rate volatilities.

- For level 3 credit derivatives, significant unobservable inputs include illiquid credit spreads and upfront credit points, which are unique to specific reference obligations and reference entities, recovery rates and certain correlations required to value credit derivatives (e.g., the likelihood of default of the underlying reference obligation relative to one another).

- For level 3 commodity derivatives, significant unobservable inputs include volatilities for options with strike prices that differ significantly from current market prices and prices or spreads for certain products for which the product quality or physical location of the commodity is not aligned with benchmark indices.

- For level 3 equity derivatives, significant unobservable inputs generally include equity volatility inputs for options that are long-dated and/or have strike prices that differ significantly from current market prices. In addition, the valuation of certain structured trades requires the use of level 3 correlation inputs, such as the correlation of the price performance of two or more individual stocks or the correlation of the price performance for a basket of stocks to another asset class such as commodities.

Subsequent to the initial valuation of a level 3 derivative, the firm updates the level 1 and level 2 inputs to reflect observable market changes and any resulting gains and losses are classified in level 3. Level 3 inputs are changed when corroborated by evidence such as similar market transactions, third-party pricing services and/or broker or dealer quotations or other empirical market data. In circumstances where the firm cannot verify the model value by reference to market transactions, it is possible that a different valuation model could produce a materially different estimate of fair value. See below for further information about significant unobservable inputs used in the valuation of level 3 derivatives.

Valuation Adjustments

Valuation adjustments are integral to determining the fair value of derivative portfolios and are used to adjust the mid-market valuations produced by derivative pricing models to the appropriate exit price valuation. These adjustments incorporate bid/offer spreads, the cost of liquidity, credit valuation adjustments and funding valuation adjustments, which account for the credit and funding risk inherent in the uncollateralized portion of derivative portfolios. The firm also makes funding valuation adjustments to collateralized derivatives where the terms of the agreement do not permit the firm to deliver or repledge collateral received. Market-based inputs are generally used when calibrating valuation adjustments to market-clearing levels.

In addition, for derivatives that include significant unobservable inputs, the firm makes model or exit price adjustments to account for the valuation uncertainty present in the transaction.

Fair Value of Derivatives by Level

The tables below present the fair value of derivatives on a gross basis by level and major product type, as well as the impact of netting, included in the condensed consolidated statements of financial condition.

	As of March 2018			
$ in millions	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Interest rates	**$ 31**	**$ 277,689**	**$ 639**	**$ 278,359**
Credit	**–**	**18,910**	**3,485**	**22,395**
Currencies	**–**	**87,951**	**295**	**88,246**
Commodities	**–**	**13,193**	**271**	**13,464**
Equities	**8**	**52,482**	**546**	**53,036**
Gross fair value	**39**	**450,225**	**5,236**	**455,500**
Counterparty netting in levels	**(10)**	**(346,820)**	**(1,122)**	**(347,952)**
Subtotal	**$ 29**	**$ 103,405**	**$ 4,114**	**$ 107,548**
Cross-level counterparty netting				**(894)**
Cash collateral netting				**(58,608)**
Net fair value				**$ 48,046**
Liabilities				
Interest rates	**$(151)**	**$(248,397)**	**$ (888)**	**$(249,436)**
Credit	**–**	**(18,488)**	**(2,203)**	**(20,691)**
Currencies	**–**	**(86,019)**	**(126)**	**(86,145)**
Commodities	**–**	**(15,001)**	**(198)**	**(15,199)**
Equities	**(5)**	**(54,582)**	**(1,413)**	**(56,000)**
Gross fair value	**(156)**	**(422,487)**	**(4,828)**	**(427,471)**
Counterparty netting in levels	**10**	**346,820**	**1,122**	**347,952**
Subtotal	**$(146)**	**$ (75,667)**	**$(3,706)**	**$ (79,519)**
Cross-level counterparty netting				**894**
Cash collateral netting				**41,758**
Net fair value				**$ (36,867)**

	As of December 2017			
$ in millions	Level 1	Level 2	Level 3	Total
Assets				
Interest rates	$ 18	$ 282,933	$ 311	$ 283,262
Credit	–	19,053	3,640	22,693
Currencies	–	95,401	140	95,541
Commodities	–	13,727	353	14,080
Equities	8	50,870	409	51,287
Gross fair value	26	461,984	4,853	466,863
Counterparty netting in levels	–	(362,109)	(1,051)	(363,160)
Subtotal	$ 26	$ 99,875	$ 3,802	$ 103,703
Cross-level counterparty netting				(894)
Cash collateral netting				(55,472)
Net fair value				$ 47,337
Liabilities				
Interest rates	$ (28)	$(252,421)	$ (721)	$(253,170)
Credit	–	(19,135)	(2,135)	(21,270)
Currencies	–	(96,160)	(321)	(96,481)
Commodities	–	(15,842)	(306)	(16,148)
Equities	(28)	(53,902)	(1,658)	(55,588)
Gross fair value	(56)	(437,460)	(5,141)	(442,657)
Counterparty netting in levels	–	362,109	1,051	363,160
Subtotal	$ (56)	$ (75,351)	$(4,090)	$ (79,497)
Cross-level counterparty netting				894
Cash collateral netting				38,972
Net fair value				$ (39,631)

In the tables above:

- The gross fair values exclude the effects of both counterparty netting and collateral netting, and therefore are not representative of the firm's exposure.
- Counterparty netting is reflected in each level to the extent that receivable and payable balances are netted within the same level and is included in counterparty netting in levels. Where the counterparty netting is across levels, the netting is included in cross-level counterparty netting.
- Derivative assets are shown as positive amounts and derivative liabilities are shown as negative amounts.

Significant Unobservable Inputs

The table below presents the amount of level 3 assets (liabilities), and ranges, averages and medians of significant unobservable inputs used to value the firm's level 3 derivatives.

	Level 3 Assets (Liabilities) and Range of Significant Unobservable Inputs (Average/Median) as of	
$ in millions	**March 2018**	December 2017
Interest rates, net	**$(249)**	$(410)
Correlation	**(10)% to 95% (70%/78%)**	(10)% to 95% (71%/79%)
Volatility (bps)	**31 to 150 (84/77)**	31 to 150 (84/78)
Credit, net	**$1,282**	$1,505
Correlation	**59% to 91% (73%/73%)**	28% to 84% (61%/60%)
Credit spreads (bps)	**1 to 507 (73/39)**	1 to 633 (69/42)
Upfront credit points	**0 to 95 (42/38)**	0 to 97 (42/38)
Recovery rates	**22% to 73% (62%/73%)**	22% to 73% (68%/73%)
Currencies, net	**$169**	$(181)
Correlation	**10% to 72% (41%/33%)**	49% to 72% (61%/62%)
Commodities, net	**$73**	$47
Volatility	**8% to 46% (25%/25%)**	9% to 79% (24%/24%)
Natural gas spread	**$(2.19) to $0.64 ($(0.34)/$(0.26))**	$(2.38) to $3.34 ($(0.22)/$(0.12))
Oil spread	**$(9.48) to $24.64 ($1.31/$(1.49))**	$(2.86) to $23.61 ($6.47/$2.35)
Equities, net	**$(867)**	$(1,249)
Correlation	**(40)% to 94% (40%/40%)**	(36)% to 94% (50%/52%)
Volatility	**3% to 77% (23%/21%)**	4% to 72% (24%/22%)

In the table above:

- Derivative assets are shown as positive amounts and derivative liabilities are shown as negative amounts.
- Ranges represent the significant unobservable inputs that were used in the valuation of each type of derivative.
- Averages represent the arithmetic average of the inputs and are not weighted by the relative fair value or notional of the respective financial instruments. An average greater than the median indicates that the majority of inputs are below the average. For example, the difference between the average and the median for credit spreads and oil spread inputs indicates that the majority of the inputs fall in the lower end of the range.
- The ranges, averages and medians of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one derivative. For example, the highest correlation for interest rate derivatives is appropriate for valuing a specific interest rate derivative but may not be appropriate for valuing any other interest rate derivative. Accordingly, the ranges of inputs do not represent uncertainty in, or possible ranges of, fair value measurements of the firm's level 3 derivatives.
- Interest rates, currencies and equities derivatives are valued using option pricing models, credit derivatives are valued using option pricing, correlation and discounted cash flow models, and commodities derivatives are valued using option pricing and discounted cash flow models.
- The fair value of any one instrument may be determined using multiple valuation techniques. For example, option pricing models and discounted cash flows models are typically used together to determine fair value. Therefore, the level 3 balance encompasses both of these techniques.
- Correlation within currencies and equities includes cross-product type correlation.
- Natural gas spread represents the spread per million British thermal units of natural gas.
- Oil spread represents the spread per barrel of oil and refined products.

Range of Significant Unobservable Inputs

The following is information about the ranges of significant unobservable inputs used to value the firm's level 3 derivative instruments:

- **Correlation.** Ranges for correlation cover a variety of underliers both within one product type (e.g., equity index and equity single stock names) and across product types (e.g., correlation of an interest rate and a currency), as well as across regions. Generally, cross-product type correlation inputs are used to value more complex instruments and are lower than correlation inputs on assets within the same derivative product type.
- **Volatility.** Ranges for volatility cover numerous underliers across a variety of markets, maturities and strike prices. For example, volatility of equity indices is generally lower than volatility of single stocks.
- **Credit spreads, upfront credit points and recovery rates.** The ranges for credit spreads, upfront credit points and recovery rates cover a variety of underliers (index and single names), regions, sectors, maturities and credit qualities (high-yield and investment-grade). The broad range of this population gives rise to the width of the ranges of significant unobservable inputs.

- **Commodity prices and spreads.** The ranges for commodity prices and spreads cover variability in products, maturities and delivery locations.

Sensitivity of Fair Value Measurement to Changes in Significant Unobservable Inputs

The following is a description of the directional sensitivity of the firm's level 3 fair value measurements to changes in significant unobservable inputs, in isolation:

- **Correlation.** In general, for contracts where the holder benefits from the convergence of the underlying asset or index prices (e.g., interest rates, credit spreads, foreign exchange rates, inflation rates and equity prices), an increase in correlation results in a higher fair value measurement.
- **Volatility.** In general, for purchased options, an increase in volatility results in a higher fair value measurement.
- **Credit spreads, upfront credit points and recovery rates.** In general, the fair value of purchased credit protection increases as credit spreads or upfront credit points increase or recovery rates decrease. Credit spreads, upfront credit points and recovery rates are strongly related to distinctive risk factors of the underlying reference obligations, which include reference entity-specific factors such as leverage, volatility and industry, market-based risk factors, such as borrowing costs or liquidity of the underlying reference obligation, and macroeconomic conditions.
- **Commodity prices and spreads.** In general, for contracts where the holder is receiving a commodity, an increase in the spread (price difference from a benchmark index due to differences in quality or delivery location) or price results in a higher fair value measurement.

Due to the distinctive nature of each of the firm's level 3 derivatives, the interrelationship of inputs is not necessarily uniform within each product type.

Level 3 Rollforward

The table below presents a summary of the changes in fair value for all level 3 derivatives.

	Three Months Ended March	
$ in millions	**2018**	2017
Total level 3 derivatives		
Beginning balance	**$(288)**	$(1,217)
Net realized gains/(losses)	**52**	(15)
Net unrealized gains/(losses)	**219**	769
Purchases	**134**	79
Sales	**(124)**	(458)
Settlements	**329**	871
Transfers into level 3	**41**	(10)
Transfers out of level 3	**45**	78
Ending balance	**$ 408**	$ 97

In the table above:

- Changes in fair value are presented for all derivative assets and liabilities that are classified in level 3 as of the end of the period.
- Net unrealized gains/(losses) relates to instruments that were still held at period-end.
- If a derivative was transferred into level 3 during a reporting period, its entire gain or loss for the period is classified in level 3. Transfers between levels are reported at the beginning of the reporting period in which they occur.
- Positive amounts for transfers into level 3 and negative amounts for transfers out of level 3 represent net transfers of derivative assets. Negative amounts for transfers into level 3 and positive amounts for transfers out of level 3 represent net transfers of derivative liabilities.
- A derivative with level 1 and/or level 2 inputs is classified in level 3 in its entirety if it has at least one significant level 3 input.
- If there is one significant level 3 input, the entire gain or loss from adjusting only observable inputs (i.e., level 1 and level 2 inputs) is classified in level 3.
- Gains or losses that have been classified in level 3 resulting from changes in level 1 or level 2 inputs are frequently offset by gains or losses attributable to level 1 or level 2 derivatives and/or level 1, level 2 and level 3 cash instruments. As a result, gains/(losses) included in the level 3 rollforward below do not necessarily represent the overall impact on the firm's results of operations, liquidity or capital resources.

The table below disaggregates, by major product type, the information for level 3 derivatives included in the summary table above.

	Three Months Ended March	
$ in millions	**2018**	2017
Interest rates, net		
Beginning balance	**$ (410)**	$ (381)
Net realized gains/(losses)	**(5)**	(22)
Net unrealized gains/(losses)	**105**	103
Purchases	**6**	4
Sales	**(7)**	(9)
Settlements	**29**	46
Transfers into level 3	**38**	(10)
Transfers out of level 3	**(5)**	(13)
Ending balance	**$ (249)**	$ (282)
Credit, net		
Beginning balance	**$ 1,505**	$ 2,504
Net realized gains/(losses)	**15**	43
Net unrealized gains/(losses)	**(297)**	(174)
Purchases	**19**	16
Sales	**(23)**	(20)
Settlements	**55**	(135)
Transfers into level 3	**(15)**	13
Transfers out of level 3	**23**	(8)
Ending balance	**$ 1,282**	$ 2,239
Currencies, net		
Beginning balance	**$ (181)**	$ 3
Net realized gains/(losses)	**(17)**	(22)
Net unrealized gains/(losses)	**125**	(13)
Purchases	**7**	2
Sales	**(2)**	–
Settlements	**210**	51
Transfers into level 3	**27**	(2)
Transfers out of level 3	**–**	5
Ending balance	**$ 169**	$ 24
Commodities, net		
Beginning balance	**$ 47**	$ 73
Net realized gains/(losses)	**(6)**	–
Net unrealized gains/(losses)	**31**	20
Purchases	**12**	13
Sales	**(1)**	(13)
Settlements	**(8)**	(21)
Transfers into level 3	**(8)**	(9)
Transfers out of level 3	**6**	15
Ending balance	**$ 73**	$ 78
Equities, net		
Beginning balance	**$(1,249)**	$(3,416)
Net realized gains/(losses)	**65**	(14)
Net unrealized gains/(losses)	**255**	833
Purchases	**90**	44
Sales	**(91)**	(416)
Settlements	**43**	930
Transfers into level 3	**(1)**	(2)
Transfers out of level 3	**21**	79
Ending balance	**$ (867)**	$(1,962)

Level 3 Rollforward Commentary

Three Months Ended March 2018. The net realized and unrealized gains on level 3 derivatives of $271 million (reflecting $52 million of net realized gains and $219 million of net unrealized gains) for the three months ended March 2018 included gains of $184 million and $87 million reported in market making and other principal transactions, respectively.

The net unrealized gains on level 3 derivatives for the three months ended March 2018 were primarily attributable to gains on certain equity derivatives, reflecting the impact of a decrease in equity prices, gains on certain currency derivatives, primarily reflecting the impact of changes in foreign exchange rates, and gains on certain interest rate derivatives, primarily reflecting the impact of an increase in interest rates, partially offset by losses on certain credit derivatives reflecting the impact of changes in foreign exchange rates.

Transfers into level 3 derivatives during the three months ended March 2018 were not material.

Transfers out of level 3 derivatives during the three months ended March 2018 were not material.

Three Months Ended March 2017. The net realized and unrealized gains on level 3 derivatives of $754 million (reflecting $15 million of net realized losses and $769 million of net unrealized gains) for the three months ended March 2017 included gains/(losses) of $848 million and $(94) million reported in market making and other principal transactions, respectively.

The net unrealized gains on level 3 derivatives for the three months ended March 2017 were primarily attributable to gains on certain equity derivatives, reflecting the impact of an increase in equity prices.

Transfers into level 3 derivatives during the three months ended March 2017 were not material.

Transfers out of level 3 derivatives during the three months ended March 2017 primarily reflected transfers of certain equity derivative liabilities to level 2, principally due to certain unobservable volatility inputs not being significant to the valuation of these derivatives.

OTC Derivatives

The table below presents the fair values of OTC derivative assets and liabilities by tenor and major product type.

$ in millions	Less than 1 Year	1 - 5 Years	Greater than 5 Years	Total
As of March 2018				
Assets				
Interest rates	**$ 3,677**	**$15,658**	**$57,443**	**$ 76,778**
Credit	**883**	**4,183**	**3,194**	**8,260**
Currencies	**10,902**	**6,032**	**8,366**	**25,300**
Commodities	**3,804**	**1,642**	**172**	**5,618**
Equities	**7,104**	**5,426**	**1,399**	**13,929**
Counterparty netting in tenors	**(3,184)**	**(3,871)**	**(2,564)**	**(9,619)**
Subtotal	**$23,186**	**$29,070**	**$68,010**	**$120,266**
Cross-tenor counterparty netting				**(16,410)**
Cash collateral netting				**(58,608)**
Total				**$ 45,248**
Liabilities				
Interest rates	**$ 5,888**	**$ 8,646**	**$33,401**	**$ 47,935**
Credit	**1,891**	**3,364**	**1,300**	**6,555**
Currencies	**12,452**	**6,586**	**4,155**	**23,193**
Commodities	**3,216**	**1,709**	**2,440**	**7,365**
Equities	**6,568**	**7,355**	**3,150**	**17,073**
Counterparty netting in tenors	**(3,184)**	**(3,871)**	**(2,564)**	**(9,619)**
Subtotal	**$26,831**	**$23,789**	**$41,882**	**$ 92,502**
Cross-tenor counterparty netting				**(16,410)**
Cash collateral netting				**(41,758)**
Total				**$ 34,334**
As of December 2017				
Assets				
Interest rates	$ 3,717	$15,445	$57,200	$ 76,362
Credit	760	4,079	3,338	8,177
Currencies	12,184	6,219	7,245	25,648
Commodities	3,175	2,526	181	5,882
Equities	4,969	5,607	1,387	11,963
Counterparty netting in tenors	(3,719)	(4,594)	(2,807)	(11,120)
Subtotal	$21,086	$29,282	$66,544	$116,912
Cross-tenor counterparty netting				(16,404)
Cash collateral netting				(55,472)
Total				$45,036
Liabilities				
Interest rates	$ 4,517	$ 8,471	$33,193	$ 46,181
Credit	2,078	3,588	1,088	6,754
Currencies	14,326	7,119	4,802	26,247
Commodities	3,599	2,167	2,465	8,231
Equities	6,453	6,647	3,381	16,481
Counterparty netting in tenors	(3,719)	(4,594)	(2,807)	(11,120)
Subtotal	$27,254	$23,398	$42,122	$ 92,774
Cross-tenor counterparty netting				(16,404)
Cash collateral netting				(38,972)
Total				$ 37,398

In the table above:

- Tenor is based on remaining contractual maturity.
- Counterparty netting within the same product type and tenor category is included within such product type and tenor category.
- Counterparty netting across product types within the same tenor category is included in counterparty netting in tenors. Where the counterparty netting is across tenor categories, the netting is included in cross-tenor counterparty netting.

Credit Derivatives

The firm enters into a broad array of credit derivatives in locations around the world to facilitate client transactions and to manage the credit risk associated with market-making and investing and lending activities. Credit derivatives are actively managed based on the firm's net risk position.

Credit derivatives are generally individually negotiated contracts and can have various settlement and payment conventions. Credit events include failure to pay, bankruptcy, acceleration of indebtedness, restructuring, repudiation and dissolution of the reference entity.

The firm enters into the following types of credit derivatives:

- **Credit Default Swaps.** Single-name credit default swaps protect the buyer against the loss of principal on one or more bonds, loans or mortgages (reference obligations) in the event the issuer (reference entity) of the reference obligations suffers a credit event. The buyer of protection pays an initial or periodic premium to the seller and receives protection for the period of the contract. If there is no credit event, as defined in the contract, the seller of protection makes no payments to the buyer of protection. However, if a credit event occurs, the seller of protection is required to make a payment to the buyer of protection, which is calculated in accordance with the terms of the contract.
- **Credit Options.** In a credit option, the option writer assumes the obligation to purchase or sell a reference obligation at a specified price or credit spread. The option purchaser buys the right, but does not assume the obligation, to sell the reference obligation to, or purchase it from, the option writer. The payments on credit options depend either on a particular credit spread or the price of the reference obligation.
- **Credit Indices, Baskets and Tranches.** Credit derivatives may reference a basket of single-name credit default swaps or a broad-based index. If a credit event occurs in one of the underlying reference obligations, the protection seller pays the protection buyer. The payment is typically a pro-rata portion of the transaction's total notional amount based on the underlying defaulted reference obligation. In certain transactions, the credit risk of a basket or index is separated into various portions (tranches), each having different levels of subordination. The most junior tranches cover initial defaults and once losses exceed the notional amount of these junior tranches, any excess loss is covered by the next most senior tranche in the capital structure.

- **Total Return Swaps.** A total return swap transfers the risks relating to economic performance of a reference obligation from the protection buyer to the protection seller. Typically, the protection buyer receives from the protection seller a floating rate of interest and protection against any reduction in fair value of the reference obligation, and in return the protection seller receives the cash flows associated with the reference obligation, plus any increase in the fair value of the reference obligation.

The firm economically hedges its exposure to written credit derivatives primarily by entering into offsetting purchased credit derivatives with identical underliers. Substantially all of the firm's purchased credit derivative transactions are with financial institutions and are subject to stringent collateral thresholds. In addition, upon the occurrence of a specified trigger event, the firm may take possession of the reference obligations underlying a particular written credit derivative, and consequently may, upon liquidation of the reference obligations, recover amounts on the underlying reference obligations in the event of default.

As of March 2018, written and purchased credit derivatives had total gross notional amounts of $638.66 billion and $651.71 billion, respectively, for total net notional purchased protection of $13.05 billion. As of December 2017, written and purchased credit derivatives had total gross notional amounts of $611.04 billion and $643.37 billion, respectively, for total net notional purchased protection of $32.33 billion. Substantially all of the firm's written and purchased credit derivatives are credit default swaps.

The table below presents certain information about credit derivatives.

	Credit Spread on Underlier (basis points)				
$ in millions	0 - 250	251 - 500	501 - 1,000	Greater than 1,000	Total
As of March 2018					
Maximum Payout/Notional Amount of Written Credit Derivatives by Tenor					
Less than 1 year	**$186,125**	**$ 6,401**	**$ 541**	**$ 3,750**	**$196,817**
1 – 5 years	**324,297**	**10,169**	**8,868**	**6,181**	**349,515**
Greater than 5 years	**83,191**	**5,894**	**2,575**	**672**	**92,332**
Total	**$593,613**	**$22,464**	**$11,984**	**$10,603**	**$638,664**
Maximum Payout/Notional Amount of Purchased Credit Derivatives					
Offsetting	**$507,206**	**$15,315**	**$10,960**	**$ 9,256**	**$542,737**
Other	**99,322**	**6,705**	**1,811**	**1,131**	**108,969**
Fair Value of Written Credit Derivatives					
Asset	**$ 13,723**	**$ 754**	**$ 220**	**$ 137**	**$ 14,834**
Liability	**1,246**	**394**	**922**	**3,625**	**6,187**
Net asset/(liability)	**$ 12,477**	**$ 360**	**$ (702)**	**$ (3,488)**	**$ 8,647**
As of December 2017					
Maximum Payout/Notional Amount of Written Credit Derivatives by Tenor					
Less than 1 year	$182,446	$ 8,531	$ 705	$ 4,067	$195,749
1 – 5 years	335,872	10,201	8,747	7,553	362,373
Greater than 5 years	49,440	2,142	817	519	52,918
Total	$567,758	$20,874	$10,269	$12,139	$611,040
Maximum Payout/Notional Amount of Purchased Credit Derivatives					
Offsetting	$492,325	$13,424	$ 9,395	$10,663	$525,807
Other	99,861	14,483	1,777	1,442	117,563
Fair Value of Written Credit Derivatives					
Asset	$ 14,317	$ 513	$ 208	$ 155	$ 15,193
Liability	896	402	752	3,920	5,970
Net asset/(liability)	$ 13,421	$ 111	$ (544)	$ (3,765)	$ 9,223

In the table above:

- Fair values exclude the effects of both netting of receivable balances with payable balances under enforceable netting agreements, and netting of cash received or posted under enforceable credit support agreements, and therefore are not representative of the firm's credit exposure.
- Tenor is based on remaining contractual maturity.
- The credit spread on the underlier, together with the tenor of the contract, are indicators of payment/performance risk. The firm is less likely to pay or otherwise be required to perform where the credit spread and the tenor are lower.
- Offsetting purchased credit derivatives represent the notional amount of purchased credit derivatives that economically hedge written credit derivatives with identical underliers.
- Other purchased credit derivatives represent the notional amount of all other purchased credit derivatives not included in offsetting.

Impact of Credit Spreads on Derivatives

On an ongoing basis, the firm realizes gains or losses relating to changes in credit risk through the unwind of derivative contracts and changes in credit mitigants.

The net gain, including hedges, attributable to the impact of changes in credit exposure and credit spreads (counterparty and the firm's) on derivatives was $152 million and $11 million for the three months ended March 2018 and March 2017, respectively.

Bifurcated Embedded Derivatives

The table below presents the fair value and the notional amount of derivatives that have been bifurcated from their related borrowings.

	As of	
$ in millions	**March 2018**	December 2017
Fair value of assets	**$ 895**	$ 882
Fair value of liabilities	**1,393**	1,200
Net liability	**$ 498**	$ 318
Notional amount	**$9,638**	$9,578

In the table above, these derivatives, which are recorded at fair value, primarily consist of interest rate, equity and commodity products and are included in unsecured short-term borrowings and unsecured long-term borrowings with the related borrowings. See Note 8 for further information.

Derivatives with Credit-Related Contingent Features

Certain of the firm's derivatives have been transacted under bilateral agreements with counterparties who may require the firm to post collateral or terminate the transactions based on changes in the firm's credit ratings. The firm assesses the impact of these bilateral agreements by determining the collateral or termination payments that would occur assuming a downgrade by all rating agencies. A downgrade by any one rating agency, depending on the agency's relative ratings of the firm at the time of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies.

The table below presents the aggregate fair value of net derivative liabilities under such agreements (excluding application of collateral posted to reduce these liabilities), the related aggregate fair value of the assets posted as collateral and the additional collateral or termination payments that could have been called by counterparties in the event of a one-notch and two-notch downgrade in the firm's credit ratings.

	As of	
$ in millions	**March 2018**	December 2017
Net derivative liabilities under bilateral agreements	**$27,062**	$29,877
Collateral posted	**$23,997**	$25,329
Additional collateral or termination payments:		
One-notch downgrade	**$ 307**	$ 358
Two-notch downgrade	**$ 950**	$ 1,856

Hedge Accounting

The firm applies hedge accounting for (i) certain interest rate swaps used to manage the interest rate exposure of certain fixed-rate unsecured long-term and short-term borrowings and certain fixed-rate certificates of deposit and (ii) certain foreign currency forward contracts and foreign currency-denominated debt used to manage foreign currency exposures on the firm's net investment in certain non-U.S. operations.

To qualify for hedge accounting, the hedging instrument must be highly effective at reducing the risk from the exposure being hedged. Additionally, the firm must formally document the hedging relationship at inception and assess the hedging relationship at least on a quarterly basis to ensure the hedging instrument continues to be highly effective over the life of the hedging relationship.

Fair Value Hedges

The firm designates certain interest rate swaps as fair value hedges of certain fixed-rate unsecured long-term and short-term debt and fixed-rate certificates of deposit. These interest rate swaps hedge changes in fair value attributable to the designated benchmark interest rate (e.g., London Interbank Offered Rate (LIBOR) or Overnight Index Swap Rate), effectively converting a substantial portion of fixed-rate obligations into floating-rate obligations.

The firm applies a statistical method that utilizes regression analysis when assessing the effectiveness of its fair value hedging relationships in achieving offsetting changes in the fair values of the hedging instrument and the risk being hedged (i.e., interest rate risk). An interest rate swap is considered highly effective in offsetting changes in fair value attributable to changes in the hedged risk when the regression analysis results in a coefficient of determination of 80% or greater and a slope between 80% and 125%.

For qualifying fair value hedges, gains or losses on derivatives are included in interest expense. The change in fair value of the hedged item attributable to the risk being hedged is reported as an adjustment to its carrying value (hedging adjustment) and is also included in interest expense. When a derivative is no longer designated as a hedge, any remaining difference between the carrying value and par value of the hedged item is amortized to interest expense over the remaining life of the hedged item using the effective interest method. See Note 23 for further information about interest income and interest expense.

The table below presents the gains/(losses) from interest rate derivatives accounted for as hedges and the related hedged borrowings and deposits, and the firm's total interest expense.

	Three Months Ended March	
$ in millions	**2018**	2017
Interest rate hedges	**$ (1,369)**	$ (754)
Hedged borrowings and deposits	**$ 1,230**	$ 554
Interest expense	**$ 3,312**	$2,230

In the table above:

- The difference between gains/(losses) from interest rate hedges and hedged borrowings and deposits was primarily due to the amortization of prepaid credit spreads resulting from the passage of time.
- Hedge ineffectiveness for the three months ended March 2017 was $200 million.

The table below presents the carrying amount of the hedged items that are currently designated in a hedging relationship and the related cumulative hedging adjustment (increase/(decrease)) from current and prior hedging relationships included in such carrying amounts.

	As of March 2018	
$ in millions	**Carrying Amount**	**Cumulative Hedging Adjustment**
Deposits	**$10,491**	**$ (264)**
Unsecured short-term borrowings	**$ 5,229**	**$ 17**
Unsecured long-term borrowings	**$58,343**	**$2,049**

In the table above, cumulative hedging adjustment included $1.27 billion of hedging adjustments from prior hedging relationships that were de-designated and substantially all were related to unsecured long-term borrowings.

In addition, as of March 2018, cumulative hedging adjustments for items no longer designated in a hedging relationship were $2.63 billion and substantially all were related to unsecured long-term borrowings.

Net Investment Hedges

The firm seeks to reduce the impact of fluctuations in foreign exchange rates on its net investments in certain non-U.S. operations through the use of foreign currency forward contracts and foreign currency-denominated debt. For foreign currency forward contracts designated as hedges, the effectiveness of the hedge is assessed based on the overall changes in the fair value of the forward contracts (i.e., based on changes in forward rates). For foreign currency-denominated debt designated as a hedge, the effectiveness of the hedge is assessed based on changes in spot rates.

Beginning in January 2018, in accordance with ASU No. 2017-12 for qualifying net investment hedges, all gains or losses on the hedging instruments are included in currency translation. Prior to January 2018, gains or losses on the hedging instruments, only to the extent effective, were included in currency translation.

The table below presents the gains/(losses) from net investment hedging.

	Three Months Ended March	
$ in millions	**2018**	2017
Hedges:		
Foreign currency forward contract	**$(210)**	$(349)
Foreign currency-denominated debt	**$(107)**	$ (82)

Gains or losses on individual net investments in non-U.S. operations are reclassified to earnings from accumulated other comprehensive income when such net investments are sold or substantially liquidated. The net gain/(loss) reclassified to earnings from accumulated other comprehensive income was not material for both the three months ended March 2018 and March 2017. The gain/(loss) related to ineffectiveness was not material for the three months ended March 2017.

As of March 2018 and December 2017, the firm had designated $1.96 billion and $1.81 billion, respectively, of foreign currency-denominated debt, included in unsecured long-term borrowings and unsecured short-term borrowings, as hedges of net investments in non-U.S. subsidiaries.

Note 8.
Fair Value Option

Other Financial Assets and Financial Liabilities at Fair Value

In addition to all cash and derivative instruments included in financial instruments owned and financial instruments sold, but not yet purchased, the firm accounts for certain of its other financial assets and financial liabilities at fair value, substantially all of which are accounted for at fair value under the fair value option. The primary reasons for electing the fair value option are to:

- Reflect economic events in earnings on a timely basis;
- Mitigate volatility in earnings from using different measurement attributes (e.g., transfers of financial instruments owned accounted for as financings are recorded at fair value, whereas the related secured financing would be recorded on an accrual basis absent electing the fair value option); and
- Address simplification and cost-benefit considerations (e.g., accounting for hybrid financial instruments at fair value in their entirety versus bifurcation of embedded derivatives and hedge accounting for debt hosts).

Hybrid financial instruments are instruments that contain bifurcatable embedded derivatives and do not require settlement by physical delivery of nonfinancial assets (e.g., physical commodities). If the firm elects to bifurcate the embedded derivative from the associated debt, the derivative is accounted for at fair value and the host contract is accounted for at amortized cost, adjusted for the effective portion of any fair value hedges. If the firm does not elect to bifurcate, the entire hybrid financial instrument is accounted for at fair value under the fair value option.

Other financial assets and financial liabilities accounted for at fair value under the fair value option include:

- Repurchase agreements and substantially all resale agreements;
- Securities borrowed and loaned within Fixed Income, Currency and Commodities Client Execution (FICC Client Execution);
- Substantially all other secured financings, including transfers of assets accounted for as financings rather than sales;
- Certain unsecured short-term and long-term borrowings, substantially all of which are hybrid financial instruments;
- Certain receivables from customers and counterparties, including transfers of assets accounted for as secured loans rather than purchases and certain margin loans;
- Certain time deposits issued by the firm's bank subsidiaries (deposits with no stated maturity are not eligible for a fair value option election), including structured certificates of deposit, which are hybrid financial instruments; and
- Certain subordinated liabilities of consolidated VIEs.

Fair Value of Other Financial Assets and Financial Liabilities by Level

The table below presents, by level within the fair value hierarchy, other financial assets and financial liabilities at fair value, substantially all of which are accounted for at fair value under the fair value option.

$ in millions	Level 1	Level 2	Level 3	Total
As of March 2018				
Assets				
Securities purchased under agreements to resell	**$ –**	**$ 131,103**	**$ –**	**$ 131,103**
Securities borrowed	**–**	**68,730**	**–**	**68,730**
Receivables from customers and counterparties	**–**	**2,484**	**1**	**2,485**
Total	**$ –**	**$ 202,317**	**$ 1**	**$ 202,318**
Liabilities				
Deposits	**$ –**	**$ (24,391)**	**$ (3,146)**	**$ (27,537)**
Securities sold under agreements to repurchase	**–**	**(94,655)**	**(35)**	**(94,690)**
Securities loaned	**–**	**(5,776)**	**–**	**(5,776)**
Other secured financings	**–**	**(26,334)**	**(332)**	**(26,666)**
Unsecured borrowings:				
Short-term	**–**	**(15,754)**	**(4,894)**	**(20,648)**
Long-term	**–**	**(32,507)**	**(8,043)**	**(40,550)**
Other liabilities and accrued expenses	**–**	**(43)**	**(61)**	**(104)**
Total	**$ –**	**$(199,460)**	**$(16,511)**	**$(215,971)**
As of December 2017				
Assets				
Securities purchased under agreements to resell	$ –	$ 120,420	$ –	$ 120,420
Securities borrowed	–	78,189	–	78,189
Receivables from customers and counterparties	–	3,522	4	3,526
Total	$ –	$ 202,131	$ 4	$ 202,135
Liabilities				
Deposits	$ –	$ (19,934)	$ (2,968)	$ (22,902)
Securities sold under agreements to repurchase	–	(84,681)	(37)	(84,718)
Securities loaned	–	(5,357)	–	(5,357)
Other secured financings	–	(23,956)	(389)	(24,345)
Unsecured borrowings:				
Short-term	–	(12,310)	(4,594)	(16,904)
Long-term	–	(31,204)	(7,434)	(38,638)
Other liabilities and accrued expenses	–	(228)	(40)	(268)
Total	$ –	$(177,670)	$(15,462)	$(193,132)

In the table above, other financial assets are shown as positive amounts and other financial liabilities are shown as negative amounts.

Valuation Techniques and Significant Inputs

Other financial assets and financial liabilities at fair value are generally valued based on discounted cash flow techniques, which incorporate inputs with reasonable levels of price transparency, and are generally classified in level 2 because the inputs are observable. Valuation adjustments may be made for liquidity and for counterparty and the firm's credit quality.

See below for information about the significant inputs used to value other financial assets and financial liabilities at fair value, including the ranges of significant unobservable inputs used to value the level 3 instruments within these categories. These ranges represent the significant unobservable inputs that were used in the valuation of each type of other financial assets and financial liabilities at fair value. The ranges and weighted averages of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one instrument. For example, the highest yield presented below for other secured financings is appropriate for valuing a specific agreement in that category but may not be appropriate for valuing any other agreements in that category. Accordingly, the ranges of inputs presented below do not represent uncertainty in, or possible ranges of, fair value measurements of the firm's level 3 other financial assets and financial liabilities.

Resale and Repurchase Agreements and Securities Borrowed and Loaned. The significant inputs to the valuation of resale and repurchase agreements and securities borrowed and loaned are funding spreads, the amount and timing of expected future cash flows and interest rates. As of both March 2018 and December 2017, the firm had no level 3 resale agreements, securities borrowed or securities loaned. As of both March 2018 and December 2017, the firm's level 3 repurchase agreements were not material. See Note 10 for further information about collateralized agreements and financings.

Other Secured Financings. The significant inputs to the valuation of other secured financings at fair value are the amount and timing of expected future cash flows, interest rates, funding spreads, the fair value of the collateral delivered by the firm (which is determined using the amount and timing of expected future cash flows, market prices, market yields and recovery assumptions) and the frequency of additional collateral calls. The ranges of significant unobservable inputs used to value level 3 other secured financings are as follows:

As of March 2018:

- Yield: 0.6% to 13.0% (weighted average: 3.4%)
- Duration: 2.0 to 10.8 years (weighted average: 3.2 years)

As of December 2017:

- Yield: 0.6% to 13.0% (weighted average: 3.3%)
- Duration: 0.7 to 11.0 years (weighted average: 2.7 years)

Generally, increases in yield or duration, in isolation, would result in a lower fair value measurement. Due to the distinctive nature of each of the firm's level 3 other secured financings, the interrelationship of inputs is not necessarily uniform across such financings. See Note 10 for further information about collateralized agreements and financings.

Unsecured Short-term and Long-term Borrowings. The significant inputs to the valuation of unsecured short-term and long-term borrowings at fair value are the amount and timing of expected future cash flows, interest rates, the credit spreads of the firm, as well as commodity prices in the case of prepaid commodity transactions. The inputs used to value the embedded derivative component of hybrid financial instruments are consistent with the inputs used to value the firm's other derivative instruments. See Note 7 for further information about derivatives. See Notes 15 and 16 for further information about unsecured short-term and long-term borrowings, respectively.

Certain of the firm's unsecured short-term and long-term borrowings are classified in level 3, substantially all of which are hybrid financial instruments. As the significant unobservable inputs used to value hybrid financial instruments primarily relate to the embedded derivative component of these borrowings, these inputs are incorporated in the firm's derivative disclosures related to unobservable inputs in Note 7.

Receivables from Customers and Counterparties. Receivables from customers and counterparties at fair value primarily consist of transfers of assets accounted for as secured loans rather than purchases. The significant inputs to the valuation of such receivables are commodity prices, interest rates, the amount and timing of expected future cash flows and funding spreads. As of both March 2018 and December 2017, the firm's level 3 receivables from customers and counterparties were not material.

Deposits. The significant inputs to the valuation of time deposits are interest rates and the amount and timing of future cash flows. The inputs used to value the embedded derivative component of hybrid financial instruments are consistent with the inputs used to value the firm's other derivative instruments. See Note 7 for further information about derivatives and Note 14 for further information about deposits.

The firm's deposits that are classified in level 3 are hybrid financial instruments. As the significant unobservable inputs used to value hybrid financial instruments primarily relate to the embedded derivative component of these deposits, these inputs are incorporated in the firm's derivative disclosures related to unobservable inputs in Note 7.

Transfers Between Levels of the Fair Value Hierarchy

Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. There were no transfers of other financial assets and financial liabilities between level 1 and level 2 during both the three months ended March 2018 and March 2017. See "Level 3 Rollforward" below for information about transfers between level 2 and level 3.

Level 3 Rollforward

The table below presents a summary of the changes in fair value for level 3 other financial assets and financial liabilities accounted for at fair value.

	Three Months Ended March	
$ in millions	**2018**	2017
Total other financial assets		
Beginning balance	**$ 4**	$ 55
Net realized gains/(losses)	**–**	(3)
Net unrealized gains/(losses)	**(3)**	–
Settlements	**–**	(38)
Ending balance	**$ 1**	$ 14
Total other financial liabilities		
Beginning balance	**$(15,462)**	$(14,979)
Net realized gains/(losses)	**(34)**	(104)
Net unrealized gains/(losses)	**362**	(344)
Purchases	**(5)**	(2)
Sales	**3**	–
Issuances	**(4,591)**	(2,916)
Settlements	**2,346**	2,406
Transfers into level 3	**(27)**	(327)
Transfers out of level 3	**897**	101
Ending balance	**$(16,511)**	$(16,165)

In the table above:

- Changes in fair value are presented for all other financial assets and financial liabilities that are classified in level 3 as of the end of the period.
- Net unrealized gains/(losses) relates to instruments that were still held at period-end.
- If a financial asset or financial liability was transferred to level 3 during a reporting period, its entire gain or loss for the period is classified in level 3. For level 3 other financial assets, increases are shown as positive amounts, while decreases are shown as negative amounts. For level 3 other financial liabilities, increases are shown as negative amounts, while decreases are shown as positive amounts.
- Level 3 other financial assets and financial liabilities are frequently economically hedged with cash instruments and derivatives. Accordingly, gains or losses that are classified in level 3 can be partially offset by gains or losses attributable to level 1, 2 or 3 cash instruments or derivatives. As a result, gains or losses included in the level 3 rollforward below do not necessarily represent the overall impact on the firm's results of operations, liquidity or capital resources.

The table below disaggregates, by the condensed consolidated statements of financial condition line items, the information for other financial liabilities included in the summary table above.

	Three Months Ended March	
$ in millions	**2018**	2017
Deposits		
Beginning balance	**$(2,968)**	$(3,173)
Net realized gains/(losses)	**(3)**	(1)
Net unrealized gains/(losses)	**48**	(28)
Issuances	**(216)**	(172)
Settlements	**9**	26
Transfers into level 3	**(16)**	–
Ending balance	**$(3,146)**	$(3,348)
Securities sold under agreements to repurchase		
Beginning balance	**$ (37)**	$ (66)
Settlements	**2**	2
Ending balance	**$ (35)**	$ (64)
Other secured financings		
Beginning balance	**$ (389)**	$ (557)
Net realized gains/(losses)	**–**	4
Net unrealized gains/(losses)	**(1)**	(17)
Purchases	**(4)**	(2)
Issuances	**(2)**	(2)
Settlements	**19**	92
Transfers into level 3	**–**	(87)
Transfers out of level 3	**45**	1
Ending balance	**$ (332)**	$ (568)
Unsecured short-term borrowings		
Beginning balance	**$(4,594)**	$(3,896)
Net realized gains/(losses)	**(28)**	(86)
Net unrealized gains/(losses)	**114**	(139)
Issuances	**(2,885)**	(1,803)
Settlements	**1,878**	1,683
Transfers into level 3	**(10)**	(58)
Transfers out of level 3	**631**	55
Ending balance	**$(4,894)**	$(4,244)
Unsecured long-term borrowings		
Beginning balance	**$(7,434)**	$(7,225)
Net realized gains/(losses)	**(8)**	(25)
Net unrealized gains/(losses)	**223**	(158)
Purchases	**(1)**	–
Sales	**3**	–
Issuances	**(1,483)**	(936)
Settlements	**437**	603
Transfers into level 3	**(1)**	(182)
Transfers out of level 3	**221**	45
Ending balance	**$(8,043)**	$(7,878)
Other liabilities and accrued expenses		
Beginning balance	**$ (40)**	$ (62)
Net realized gains/(losses)	**5**	4
Net unrealized gains/(losses)	**(22)**	(2)
Issuances	**(5)**	(3)
Settlements	**1**	–
Ending balance	**$ (61)**	$ (63)

Level 3 Rollforward Commentary

Three Months Ended March 2018. The net realized and unrealized gains on level 3 other financial liabilities of $328 million (reflecting $34 million of net realized losses and $362 million of net unrealized gains) for the three months ended March 2018 included gains/(losses) of $283 million, $(4) million and $(1) million reported in market making, other principal transactions and interest expense, respectively, in the condensed consolidated statements of earnings, and gains of $50 million reported in debt valuation adjustment in the condensed consolidated statements of comprehensive income.

The net unrealized gains on level 3 other financial liabilities for the three months ended March 2018 primarily reflected gains on certain hybrid financial instruments included in unsecured long-term and short-term borrowings, principally due to a decrease in global equity prices, and changes in foreign exchange rates.

Transfers into level 3 of other financial liabilities during the three months ended March 2018 were not material.

Transfers out of level 3 of other financial liabilities during the three months ended March 2018 primarily reflected transfers of certain hybrid financial instruments included in unsecured short-term and long-term borrowings, principally due to increased transparency of certain correlation and volatility inputs used to value these instruments.

Three Months Ended March 2017. The net realized and unrealized losses on level 3 other financial liabilities of $448 million (reflecting $104 million of net realized losses and $344 million of net unrealized losses) for the three months ended March 2017 included losses of $400 million, $15 million and $2 million reported in market making, other principal transactions and interest expense, respectively, in the condensed consolidated statements of earnings, and losses of $31 million reported in debt valuation adjustment in the condensed consolidated statements of comprehensive income.

The net unrealized losses on level 3 other financial liabilities for the three months ended March 2017 primarily reflected losses on certain hybrid financial instruments included in unsecured long-term and short-term borrowings, principally due to an increase in global equity prices and changes in foreign exchange rates.

Transfers into level 3 of other financial liabilities during the three months ended March 2017 primarily reflected transfers of certain hybrid financial instruments included in unsecured long-term borrowings from level 2, principally due to certain unobservable inputs being significant to the valuation of these instruments, and transfers of other secured financings from level 2, principally due to reduced transparency of certain yield inputs used to value these instruments.

Transfers out of level 3 of other financial liabilities during the three months ended March 2017 primarily reflected transfers of certain hybrid financial instruments included in unsecured short-term and long-term borrowings to level 2, principally due to increased transparency of correlation and volatility inputs used to value these instruments.

Gains and Losses on Financial Assets and Financial Liabilities Accounted for at Fair Value Under the Fair Value Option

The table below presents the gains and losses recognized in earnings as a result of the firm electing to apply the fair value option to certain financial assets and financial liabilities.

	Three Months Ended March	
$ in millions	**2018**	2017
Unsecured short-term borrowings	**$ 86**	$(861)
Unsecured long-term borrowings	**701**	(189)
Other liabilities and accrued expenses	**(17)**	187
Other	**166**	(104)
Total	**$936**	$(967)

In the table above:

- Gains/(losses) are included in market making and other principal transactions.
- Gains/(losses) exclude contractual interest, which is included in interest income and interest expense, for all instruments other than hybrid financial instruments. See Note 23 for further information about interest income and interest expense.
- Gains/(losses) included in unsecured short-term borrowings are substantially all related to the embedded derivative component of hybrid financial instruments for the three months ended March 2018 and March 2017. Gains/(losses) included in unsecured long-term borrowings are primarily related to the embedded derivative component of hybrid financial instruments for the three months ended March 2018 and March 2017. These gains and losses would have been recognized under other U.S. GAAP even if the firm had not elected to account for the entire hybrid financial instrument at fair value.
- Other liabilities and accrued expenses for the three months ended March 2017 includes gains/(losses) on certain subordinated liabilities of consolidated VIEs.
- Other primarily consists of gains/(losses) on receivables from customers and counterparties, deposits and other secured financings.

Excluding the gains and losses on the instruments accounted for under the fair value option described above, market making and other principal transactions primarily represent gains and losses on financial instruments owned and financial instruments sold, but not yet purchased.

Loans and Lending Commitments

The table below presents the difference between the aggregate fair value and the aggregate contractual principal amount for loans and long-term receivables for which the fair value option was elected.

	As of	
$ in millions	**March 2018**	December 2017
Performing loans and long-term receivables		
Aggregate contractual principal in excess of fair value	**$1,117**	$ 952
Loans on nonaccrual status and/or more than 90 days past due		
Aggregate contractual principal in excess of fair value	**$5,126**	$5,266
Aggregate fair value of loans on nonaccrual status and/or more than 90 days past due	**$2,017**	$2,104

In the table above, the aggregate contractual principal amount of loans on nonaccrual status and/or more than 90 days past due (which excludes loans carried at zero fair value and considered uncollectible) exceeds the related fair value primarily because the firm regularly purchases loans, such as distressed loans, at values significantly below the contractual principal amounts.

As of March 2018 and December 2017, the fair value of unfunded lending commitments for which the fair value option was elected was a liability of $37 million and $31 million, respectively, and the related total contractual amount of these lending commitments was $6.40 billion and $9.94 billion, respectively. See Note 18 for further information about lending commitments.

Long-Term Debt Instruments

The difference between the aggregate contractual principal amount and the related fair value of long-term other secured financings for which the fair value option was elected was not material as of both March 2018 and December 2017. The aggregate contractual principal amount of unsecured long-term borrowings for which the fair value option was elected exceeded the related fair value by $2.03 billion and $1.69 billion as of March 2018 and December 2017, respectively. The amounts above include both principal- and non-principal-protected long-term borrowings.

Impact of Credit Spreads on Loans and Lending Commitments

The estimated net gain attributable to changes in instrument-specific credit spreads on loans and lending commitments for which the fair value option was elected was $108 million and $64 million for the three months ended March 2018 and March 2017, respectively. The firm generally calculates the fair value of loans and lending commitments for which the fair value option is elected by discounting future cash flows at a rate which incorporates the instrument-specific credit spreads. For floating-rate loans and lending commitments, substantially all changes in fair value are attributable to changes in instrument-specific credit spreads, whereas for fixed-rate loans and lending commitments, changes in fair value are also attributable to changes in interest rates.

Debt Valuation Adjustment

The firm calculates the fair value of financial liabilities for which the fair value option is elected by discounting future cash flows at a rate which incorporates the firm's credit spreads.

The table below presents details about the net DVA gains/(losses) on such financial liabilities.

	Three Months Ended March	
$ in millions	**2018**	2017
DVA (pre-tax)	**$359**	$(213)
DVA (net of tax)	**$270**	$(139)

In the table above:

- DVA (net of tax) is included in debt valuation adjustment in the condensed consolidated statements of comprehensive income.
- The gains/(losses) reclassified to earnings from accumulated other comprehensive loss upon extinguishment of such financial liabilities were not material for both the three months ended March 2018 and March 2017.

Note 9.

Loans Receivable

Loans receivable consists of loans held for investment that are accounted for at amortized cost net of allowance for loan losses. Interest on loans receivable is recognized over the life of the loan and is recorded on an accrual basis.

The table below presents details about loans receivable.

	As of	
$ in millions	**March 2018**	December 2017
Corporate loans	**$33,880**	$30,749
Loans to PWM clients	**16,946**	16,591
Loans backed by commercial real estate	**9,252**	7,987
Loans backed by residential real estate	**6,713**	6,234
Marcus loans	**2,384**	1,912
Other loans	**3,286**	3,263
Total loans receivable, gross	**72,461**	66,736
Allowance for loan losses	**(764)**	(803)
Total loans receivable	**$71,697**	$65,933

As of March 2018 and December 2017, the fair value of loans receivable was $71.98 billion and $66.29 billion, respectively. Had these loans been carried at fair value and included in the fair value hierarchy, $41.66 billion and $38.75 billion would have been classified in level 2, and $30.32 billion and $27.54 billion would have been classified in level 3, as of March 2018 and December 2017, respectively.

The following is a description of the captions in the table above:

- **Corporate Loans.** Corporate loans includes term loans, revolving lines of credit, letter of credit facilities and bridge loans, and are principally used for operating liquidity and general corporate purposes, or in connection with acquisitions. Corporate loans may be secured or unsecured, depending on the loan purpose, the risk profile of the borrower and other factors. Loans receivable related to the firm's relationship lending activities are reported within corporate loans.
- **Loans to Private Wealth Management (PWM) Clients.** Loans to PWM clients includes loans used by clients to finance private asset purchases, employ leverage for strategic investments in real or financial assets, bridge cash flow timing gaps or provide liquidity for other needs. Such loans are primarily secured by securities or other assets.
- **Loans Backed by Commercial Real Estate.** Loans backed by commercial real estate includes loans extended by the firm that are directly or indirectly secured by hotels, retail stores, multifamily housing complexes and commercial and industrial properties. Loans backed by commercial real estate also includes loans purchased by the firm.

- **Loans Backed by Residential Real Estate.** Loans backed by residential real estate includes loans extended by the firm to clients who warehouse assets that are directly or indirectly secured by residential real estate. Loans backed by residential real estate also includes loans purchased by the firm.
- **Marcus Loans.** Marcus loans represents unsecured loans to retail clients.
- **Other Loans.** Other loans primarily includes loans extended to clients who warehouse assets that are directly or indirectly secured by retail loans, including auto loans, and private student loans and other assets.

Lending Commitments

The table below presents details about lending commitments that are held for investment and accounted for on an accrual basis.

	As of	
$ in millions	**March 2018**	December 2017
Corporate	**$121,901**	$118,553
Other	**6,108**	5,951
Total	**$128,009**	$124,504

In the table above:

- Corporate lending commitments primarily relates to the firm's relationship lending activities.
- Other lending commitments primarily relates to lending commitments extended by the firm to clients who warehouse assets backed by real estate and other assets.
- The carrying value of lending commitments were liabilities of $402 million (including allowance for losses of $254 million) and $423 million (including allowance for losses of $274 million) as of March 2018 and December 2017, respectively.
- The estimated fair value of such lending commitments were liabilities of $2.41 billion and $2.27 billion as of March 2018 and December 2017, respectively. Had these lending commitments been carried at fair value and included in the fair value hierarchy, $742 million and $772 million would have been classified in level 2, and $1.67 billion and $1.50 billion would have been classified in level 3, as of March 2018 and December 2017, respectively.

Purchased Credit Impaired (PCI) Loans

Loans receivable includes PCI loans, which represent acquired loans or pools of loans with evidence of credit deterioration subsequent to their origination and where it is probable, at acquisition, that the firm will not be able to collect all contractually required payments. Loans acquired within the same reporting period, which have at least two common risk characteristics, one of which relates to their credit risk, are eligible to be pooled together and considered a single unit of account. PCI loans are initially recorded at the acquisition price and the difference between the acquisition price and the expected cash flows (accretable yield) is recognized as interest income over the life of such loans or pools of loans on an effective yield method. Expected cash flows on PCI loans are determined using various inputs and assumptions, including default rates, loss severities, recoveries, amount and timing of prepayments and other macroeconomic indicators.

The table below presents details about PCI loans.

	As of	
$ in millions	**March 2018**	December 2017
Loans backed by commercial real estate	**$ 976**	$1,116
Loans backed by residential real estate	**3,138**	3,327
Other loans	**11**	10
Total gross carrying value	**$4,125**	$4,453
Total outstanding principal balance	**$8,695**	$9,512
Total accretable yield	**$ 582**	$ 662

During the three months ended March 2018, the firm did not acquire any PCI loans. During the three months ended March 2017, the firm acquired PCI loans with a fair value of $262 million. The related expected cash flows and the contractually required cash flows for such PCI loans, at the time of acquisition, were $296 million and $632 million, respectively.

Credit Quality

Risk Assessment. The firm's risk assessment process includes evaluating the credit quality of its loans receivable. For loans receivable (excluding PCI and Marcus loans) and lending commitments, the firm performs credit reviews which include initial and ongoing analyses of its borrowers. A credit review is an independent analysis of the capacity and willingness of a borrower to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the borrower's industry and the economic environment. The firm also assigns a regulatory risk rating to such loans based on the definitions provided by the U.S. federal bank regulatory agencies.

The firm enters into economic hedges to mitigate credit risk on certain loans receivable and corporate lending commitments (both of which are held for investment) related to the firm's relationship lending activities. Such hedges are accounted for at fair value. See Note 18 for further information about these lending commitments and associated hedges.

The table below presents gross loans receivable (excluding PCI and Marcus loans of $6.51 billion and $6.37 billion as of March 2018 and December 2017, respectively) and lending commitments by the firm's internally determined public rating agency equivalent and by regulatory risk rating.

$ in millions	Loans	Lending Commitments	Total
Credit Rating Equivalent			
As of March 2018			
Investment-grade	**$25,471**	**$ 92,197**	**$117,668**
Non-investment-grade	**40,481**	**35,812**	**76,293**
Total	**$65,952**	**$128,009**	**$193,961**
As of December 2017			
Investment-grade	$24,192	$ 89,409	$113,601
Non-investment-grade	36,179	35,095	71,274
Total	$60,371	$124,504	$184,875
Regulatory Risk Rating			
As of March 2018			
Non-criticized/pass	**$62,376**	**$124,342**	**$186,718**
Criticized	**3,576**	**3,667**	**7,243**
Total	**$65,952**	**$128,009**	**$193,961**
As of December 2017			
Non-criticized/pass	$56,720	$119,427	$176,147
Criticized	3,651	5,077	8,728
Total	$60,371	$124,504	$184,875

In the table above, non-criticized/pass loans and lending commitments represent loans and lending commitments that are performing and/or do not demonstrate adverse characteristics that are likely to result in a credit loss.

For Marcus loans, an important credit-quality indicator is the Fair Isaac Corporation (FICO) credit score, which measures a borrower's creditworthiness by considering factors such as payment and credit history. FICO credit scores are refreshed periodically by the firm to assess the updated creditworthiness of the borrower. As of March 2018 and December 2017, greater than 80% of the Marcus loans receivable had an underlying FICO credit score above 660 (with a weighted average FICO credit score in excess of 700).

For PCI loans, the firm's risk assessment process includes reviewing certain key metrics, such as delinquency status, collateral values, expected cash flows and other risk factors.

Impaired Loans. Loans receivable (excluding PCI loans) are determined to be impaired when it is probable that the firm will not be able to collect all principal and interest due under the contractual terms of the loan. At that time, loans are generally placed on nonaccrual status and all accrued but uncollected interest is reversed against interest income and interest subsequently collected is recognized on a cash basis to the extent the loan balance is deemed collectible. Otherwise, all cash received is used to reduce the outstanding loan balance.

In certain circumstances, the firm may also modify the original terms of a loan agreement by granting a concession to a borrower experiencing financial difficulty. Such modifications are considered troubled debt restructurings and typically include interest rate reductions, payment extensions, and modification of loan covenants. Loans modified in a troubled debt restructuring are considered impaired and are subject to specific loan-level reserves.

As of March 2018 and December 2017, the gross carrying value of impaired loans receivable (excluding PCI loans) on nonaccrual status was $836 million and $845 million, respectively. As of both March 2018 and December 2017, such loans included $61 million of corporate loans that were modified in a troubled debt restructuring. The firm did not have any lending commitments related to these loans as of both March 2018 and December 2017.

When it is determined that the firm cannot reasonably estimate expected cash flows on PCI loans or pools of loans, such loans are placed on nonaccrual status.

Allowance for Losses on Loans and Lending Commitments

The firm's allowance for loan losses consists of specific loan-level reserves, portfolio level reserves and reserves on PCI loans, as described below:

- Specific loan-level reserves are determined on loans (excluding PCI loans) that exhibit credit quality weakness and are therefore individually evaluated for impairment.
- Portfolio level reserves are determined on loans (excluding PCI loans) not evaluated for specific loan-level reserves by aggregating groups of loans with similar risk characteristics and estimating the probable loss inherent in the portfolio.
- Reserves on PCI loans are recorded when it is determined that the expected cash flows, which are reassessed on a quarterly basis, will be lower than those used to establish the current effective yield for such loans or pools of loans. If the expected cash flows are determined to be significantly higher than those used to establish the current effective yield, such increases are initially recognized as a reduction to any previously recorded allowances for loan losses and any remaining increases are recognized as interest income prospectively over the life of the loan or pools of loans as an increase to the effective yield.

The allowance for loan losses is determined using various risk factors, including industry default and loss data, current macroeconomic indicators, borrower's capacity to meet its financial obligations, borrower's country of risk, loan seniority and collateral type. In addition, for loans backed by real estate, risk factors include loan to value ratio, debt service ratio and home price index. Risk factors for Marcus loans include FICO credit scores and delinquency status.

Management's estimate of loan losses entails judgment about loan collectability at the reporting dates, and there are uncertainties inherent in those judgments. While management uses the best information available to determine this estimate, future adjustments to the allowance may be necessary based on, among other things, changes in the economic environment or variances between actual results and the original assumptions used. Loans are charged off against the allowance for loan losses when deemed to be uncollectible.

The firm also records an allowance for losses on lending commitments that are held for investment and accounted for on an accrual basis. Such allowance is determined using the same methodology as the allowance for loan losses, while also taking into consideration the probability of drawdowns or funding, and is included in other liabilities and accrued expenses.

The table below presents gross loans receivable and lending commitments by impairment methodology.

$ in millions	Specific	Portfolio	PCI	Total
As of March 2018				
Loans Receivable				
Corporate loans	**$317**	**$ 33,563**	**$ –**	**$ 33,880**
Loans to PWM clients	**131**	**16,815**	**–**	**16,946**
Loans backed by:				
Commercial real estate	**–**	**8,276**	**976**	**9,252**
Residential real estate	**314**	**3,261**	**3,138**	**6,713**
Marcus loans	**–**	**2,384**	**–**	**2,384**
Other loans	**74**	**3,201**	**11**	**3,286**
Total	**$836**	**$ 67,500**	**$4,125**	**$ 72,461**
Lending Commitments				
Corporate	**$ 33**	**$121,868**	**$ –**	**$121,901**
Other	**–**	**6,108**	**–**	**6,108**
Total	**$ 33**	**$127,976**	**$ –**	**$128,009**
As of December 2017				
Loans Receivable				
Corporate loans	$377	$ 30,372	$ –	$ 30,749
Loans to PWM clients	163	16,428	–	16,591
Loans backed by:				
Commercial real estate	–	6,871	1,116	7,987
Residential real estate	231	2,676	3,327	6,234
Marcus loans	–	1,912	–	1,912
Other loans	74	3,179	10	3,263
Total	$845	$ 61,438	$4,453	$ 66,736
Lending Commitments				
Corporate	$ 53	$118,500	$ –	$118,553
Other	–	5,951	–	5,951
Total	$ 53	$124,451	$ –	$124,504

In the table above, gross loans receivable and lending commitments, subject to specific loan-level reserves, included $602 million and $492 million of impaired loans and lending commitments as of March 2018 and December 2017, respectively, which did not require a reserve as the loan was deemed to be recoverable.

The table below presents changes in the allowance for loan losses and the allowance for losses on lending commitments, as well as details by impairment methodology.

	Three Months Ended March 2018		Year Ended December 2017	
$ in millions	**Loans Receivable**	**Lending Commitments**	Loans Receivable	Lending Commitments
Changes in the allowance for losses				
Beginning balance	**$803**	**$274**	$ 509	$212
Net charge-offs	**(60)**	**–**	(203)	–
Provision/(release)	**57**	**(13)**	574	83
Other	**(36)**	**(7)**	(77)	(21)
Ending balance	**$764**	**$254**	$ 803	$274
Allowance for losses by impairment methodology				
Specific	**$ 49**	**$ 5**	$ 119	$ 14
Portfolio	**563**	**249**	518	260
PCI	**152**	**–**	166	–
Total	**$764**	**$254**	$ 803	$274

In the table above:

- The provision for losses on loans and lending commitments is included in other principal transactions, and was primarily related to Marcus loans for the three months ended March 2018 and primarily related to corporate loans and lending commitments, and loans backed by commercial real estate for the year ended December 2017.
- Other represents the reduction to the allowance related to loans and lending commitments transferred to held for sale.
- Portfolio level reserves were primarily related to corporate loans, specific loan-level reserves were substantially all related to corporate loans and reserves on PCI loans were related to loans backed by real estate.
- Substantially all of the allowance for losses on lending commitments were related to corporate lending commitments.

Note 10.

Collateralized Agreements and Financings

Collateralized agreements are securities purchased under agreements to resell (resale agreements) and securities borrowed. Collateralized financings are securities sold under agreements to repurchase (repurchase agreements), securities loaned and other secured financings. The firm enters into these transactions in order to, among other things, facilitate client activities, invest excess cash, acquire securities to cover short positions and finance certain firm activities.

Collateralized agreements and financings are presented on a net-by-counterparty basis when a legal right of setoff exists. Interest on collateralized agreements and collateralized financings is recognized over the life of the transaction and included in interest income and interest expense, respectively. See Note 23 for further information about interest income and interest expense.

The table below presents the carrying value of resale and repurchase agreements and securities borrowed and loaned transactions.

	As of	
$ in millions	**March 2018**	December 2017
Securities purchased under agreements to resell	**$131,461**	$120,822
Securities borrowed	**$177,567**	$190,848
Securities sold under agreements to repurchase	**$ 94,690**	$ 84,718
Securities loaned	**$ 16,483**	$ 14,793

In the table above:

- Substantially all resale agreements and all repurchase agreements are carried at fair value under the fair value option. See Note 8 for further information about the valuation techniques and significant inputs used to determine fair value.
- As of March 2018 and December 2017, $68.73 billion and $78.19 billion of securities borrowed, and $5.78 billion and $5.36 billion of securities loaned were at fair value, respectively.

Resale and Repurchase Agreements

A resale agreement is a transaction in which the firm purchases financial instruments from a seller, typically in exchange for cash, and simultaneously enters into an agreement to resell the same or substantially the same financial instruments to the seller at a stated price plus accrued interest at a future date.

A repurchase agreement is a transaction in which the firm sells financial instruments to a buyer, typically in exchange for cash, and simultaneously enters into an agreement to repurchase the same or substantially the same financial instruments from the buyer at a stated price plus accrued interest at a future date.

Even though repurchase and resale agreements (including "repos- and reverses-to-maturity") involve the legal transfer of ownership of financial instruments, they are accounted for as financing arrangements because they require the financial instruments to be repurchased or resold before or at the maturity of the agreement. The financial instruments purchased or sold in resale and repurchase agreements typically include U.S. government and agency, and investment-grade sovereign obligations.

The firm receives financial instruments purchased under resale agreements and makes delivery of financial instruments sold under repurchase agreements. To mitigate credit exposure, the firm monitors the market value of these financial instruments on a daily basis, and delivers or obtains additional collateral due to changes in the market value of the financial instruments, as appropriate. For resale agreements, the firm typically requires collateral with a fair value approximately equal to the carrying value of the relevant assets in the condensed consolidated statements of financial condition.

Securities Borrowed and Loaned Transactions

In a securities borrowed transaction, the firm borrows securities from a counterparty in exchange for cash or securities. When the firm returns the securities, the counterparty returns the cash or securities. Interest is generally paid periodically over the life of the transaction.

In a securities loaned transaction, the firm lends securities to a counterparty in exchange for cash or securities. When the counterparty returns the securities, the firm returns the cash or securities posted as collateral. Interest is generally paid periodically over the life of the transaction.

The firm receives securities borrowed and makes delivery of securities loaned. To mitigate credit exposure, the firm monitors the market value of these securities on a daily basis, and delivers or obtains additional collateral due to changes in the market value of the securities, as appropriate. For securities borrowed transactions, the firm typically requires collateral with a fair value approximately equal to the carrying value of the securities borrowed transaction.

Securities borrowed and loaned within FICC Client Execution are recorded at fair value under the fair value option. See Note 8 for further information about securities borrowed and loaned accounted for at fair value.

Securities borrowed and loaned within Securities Services are recorded based on the amount of cash collateral advanced or received plus accrued interest. As these agreements generally can be terminated on demand, they exhibit little, if any, sensitivity to changes in interest rates. Therefore, the carrying value of such agreements approximates fair value. While these agreements are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these agreements been included in the firm's fair value hierarchy, they would have been classified in level 2 as of both March 2018 and December 2017.

Offsetting Arrangements

The table below presents the gross and net resale and repurchase agreements and securities borrowed and loaned transactions, and the related amount of counterparty netting included in the condensed consolidated statements of financial condition, as well as the amounts of counterparty netting and cash and securities collateral, not offset in the condensed consolidated statements of financial condition.

	Assets		Liabilities	
$ in millions	Resale agreements	Securities borrowed	Repurchase agreements	Securities loaned
As of March 2018				
Included in condensed consolidated statements of financial condition				
Gross carrying value	**$ 211,373**	**$ 185,075**	**$174,602**	**$23,991**
Counterparty netting	**(79,912)**	**(7,508)**	**(79,912)**	**(7,508)**
Total	**131,461**	**177,567**	**94,690**	**16,483**
Amounts not offset				
Counterparty netting	**(10,583)**	**(6,871)**	**(10,583)**	**(6,871)**
Collateral	**(119,044)**	**(165,022)**	**(78,940)**	**(9,412)**
Total	**$ 1,834**	**$ 5,674**	**$ 5,167**	**$ 200**
As of December 2017				
Included in condensed consolidated statements of financial condition				
Gross carrying value	$ 209,972	$ 195,783	$173,868	$19,728
Counterparty netting	(89,150)	(4,935)	(89,150)	(4,935)
Total	120,822	190,848	84,718	14,793
Amounts not offset				
Counterparty netting	(5,441)	(4,412)	(5,441)	(4,412)
Collateral	(113,305)	(177,679)	(76,793)	(9,731)
Total	$ 2,076	$ 8,757	$ 2,484	$ 650

In the table above:

- Substantially all of the gross carrying values of these arrangements are subject to enforceable netting agreements.
- Where the firm has received or posted collateral under credit support agreements, but has not yet determined such agreements are enforceable, the related collateral has not been netted.
- Amounts not offset includes counterparty netting that does not meet the criteria for netting under U.S. GAAP and the fair value of collateral received or posted subject to enforceable credit support agreements.

Gross Carrying Value of Repurchase Agreements and Securities Loaned

The table below presents the gross carrying value of repurchase agreements and securities loaned by class of collateral pledged.

$ in millions	Repurchase agreements	Securities loaned
As of March 2018		
Money market instruments	**$ 662**	**$ –**
U.S. government and agency obligations	**66,407**	**–**
Non-U.S. government and agency obligations	**71,350**	**4,881**
Securities backed by commercial real estate	**28**	**–**
Securities backed by residential real estate	**314**	**–**
Corporate debt securities	**10,973**	**651**
State and municipal obligations	**46**	**–**
Other debt obligations	**–**	**–**
Equity securities	**24,822**	**18,459**
Total	**$174,602**	**$23,991**
As of December 2017		
Money market instruments	$ 97	$ –
U.S. government and agency obligations	80,591	–
Non-U.S. government and agency obligations	73,031	2,245
Securities backed by commercial real estate	43	–
Securities backed by residential real estate	338	–
Corporate debt securities	7,140	1,145
State and municipal obligations	–	–
Other debt obligations	55	–
Equity securities	12,573	16,338
Total	$173,868	$19,728

The table below presents the gross carrying value of repurchase agreements and securities loaned by maturity date.

	As of March 2018	
$ in millions	**Repurchase agreements**	**Securities loaned**
No stated maturity and overnight	**$ 64,387**	**$10,709**
2 - 30 days	**52,801**	**3,704**
31 - 90 days	**14,910**	**1,391**
91 days - 1 year	**31,805**	**6,857**
Greater than 1 year	**10,699**	**1,330**
Total	**$174,602**	**$23,991**

In the table above:

- Repurchase agreements and securities loaned that are repayable prior to maturity at the option of the firm are reflected at their contractual maturity dates.
- Repurchase agreements and securities loaned that are redeemable prior to maturity at the option of the holder are reflected at the earliest dates such options become exercisable.

Other Secured Financings

In addition to repurchase agreements and securities loaned transactions, the firm funds certain assets through the use of other secured financings and pledges financial instruments and other assets as collateral in these transactions. These other secured financings consist of:

- Liabilities of consolidated VIEs;
- Transfers of assets accounted for as financings rather than sales (primarily collateralized central bank financings, pledged commodities, bank loans and mortgage whole loans); and
- Other structured financing arrangements.

Other secured financings includes arrangements that are nonrecourse. As of March 2018 and December 2017, nonrecourse other secured financings were $5.67 billion and $5.31 billion, respectively.

The firm has elected to apply the fair value option to substantially all other secured financings because the use of fair value eliminates non-economic volatility in earnings that would arise from using different measurement attributes. See Note 8 for further information about other secured financings that are accounted for at fair value.

Other secured financings that are not recorded at fair value are recorded based on the amount of cash received plus accrued interest, which generally approximates fair value. While these financings are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these financings been included in the firm's fair value hierarchy, they would have been classified in Level 3 as of March 2018 and primarily classified in level 2 as of December 2017.

The table below presents information about other secured financings.

$ in millions	U.S. Dollar	Non-U.S. Dollar	Total
As of March 2018			
Other secured financings (short-term):			
At fair value	**$ 7,916**	**$ 8,067**	**$15,983**
At amortized cost	**$ –**	**$ –**	**$ –**
Weighted average interest rates	***–%***	***–%***	
Other secured financings (long-term):			
At fair value	**$ 7,592**	**$ 3,091**	**$10,683**
At amortized cost	**$ 91**	**$ –**	**$ 91**
Weighted average interest rates	***4.42%***	***–%***	
Total	**$15,599**	**$11,158**	**$26,757**
Other secured financings collateralized by:			
Financial instruments	**$13,111**	**$10,677**	**$23,788**
Other assets	**$ 2,488**	**$ 481**	**$ 2,969**
As of December 2017			
Other secured financings (short-term):			
At fair value	$ 7,704	$ 6,856	$14,560
At amortized cost	$ –	$ 336	$ 336
Weighted average interest rates	*–%*	*2.61%*	
Other secured financings (long-term):			
At fair value	$ 6,779	$ 3,006	$ 9,785
At amortized cost	$ 107	$ –	$ 107
Weighted average interest rates	*3.89%*	*–%*	
Total	$14,590	$10,198	$24,788
Other secured financings collateralized by:			
Financial instruments	$12,454	$ 9,870	$22,324
Other assets	$ 2,136	$ 328	$ 2,464

In the table above:

- Short-term other secured financings includes financings maturing within one year of the financial statement date and financings that are redeemable within one year of the financial statement date at the option of the holder.
- Weighted average interest rates excludes other secured financings at fair value and includes the effect of hedging activities. See Note 7 for further information about hedging activities.
- Total other secured financings included $1.51 billion and $1.55 billion related to transfers of financial assets accounted for as financings rather than sales as of March 2018 and December 2017, respectively. Such financings were collateralized by financial assets of $1.54 billion and $1.57 billion as of March 2018 and December 2017, respectively, primarily included in financial instruments owned.
- Other secured financings collateralized by financial instruments included $18.78 billion and $16.61 billion of other secured financings collateralized by financial instruments owned as of March 2018 and December 2017, respectively, and $5.01 billion and $5.71 billion of other secured financings collateralized by financial instruments received as collateral and repledged as of March 2018 and December 2017, respectively.

The table below presents other secured financings by maturity date.

$ in millions	As of March 2018
Other secured financings (short-term)	**$15,983**
Other secured financings (long-term):	
2019	**3,493**
2020	**1,878**
2021	**620**
2022	**2,388**
2023	**202**
2024 - thereafter	**2,193**
Total other secured financings (long-term)	**10,774**
Total other secured financings	**$26,757**

In the table above:

- Long-term other secured financings that are repayable prior to maturity at the option of the firm are reflected at their contractual maturity dates.
- Long-term other secured financings that are redeemable prior to maturity at the option of the holder are reflected at the earliest dates such options become exercisable.

Collateral Received and Pledged

The firm receives cash and securities (e.g., U.S. government and agency obligations, other sovereign and corporate obligations, as well as equity securities) as collateral, primarily in connection with resale agreements, securities borrowed, derivative transactions and customer margin loans. The firm obtains cash and securities as collateral on an upfront or contingent basis for derivative instruments and collateralized agreements to reduce its credit exposure to individual counterparties.

In many cases, the firm is permitted to deliver or repledge financial instruments received as collateral when entering into repurchase agreements and securities loaned transactions, primarily in connection with secured client financing activities. The firm is also permitted to deliver or repledge these financial instruments in connection with other secured financings, collateralized derivative transactions and firm or customer settlement requirements.

The firm also pledges certain financial instruments owned in connection with repurchase agreements, securities loaned transactions and other secured financings, and other assets (substantially all real estate and cash) in connection with other secured financings to counterparties who may or may not have the right to deliver or repledge them.

The table below presents financial instruments at fair value received as collateral that were available to be delivered or repledged and were delivered or repledged by the firm.

	As of	
$ in millions	**March 2018**	December 2017
Collateral available to be delivered or repledged	**$762,556**	$763,984
Collateral that was delivered or repledged	**$625,991**	$599,565

In the table above, as of March 2018 and December 2017, collateral available to be delivered or repledged excludes $10.11 billion and $1.52 billion, respectively, of securities received under resale agreements and securities borrowed transactions that contractually had the right to be delivered or repledged, but were segregated for regulatory and other purposes.

The table below presents information about assets pledged.

	As of	
$ in millions	**March 2018**	December 2017
Financial instruments owned pledged to counterparties that:		
Had the right to deliver or repledge	**$ 61,047**	$ 50,335
Did not have the right to deliver or repledge	**$ 92,720**	$ 78,656
Other assets pledged to counterparties that did not have the right to deliver or repledge	**$ 5,468**	$ 4,838

The firm also segregated $11.31 billion and $10.42 billion of securities included in financial instruments owned as of March 2018 and December 2017, respectively, for regulatory and other purposes. See Note 3 for information about segregated cash.

Note 11.

Securitization Activities

The firm securitizes residential and commercial mortgages, corporate bonds, loans and other types of financial assets by selling these assets to securitization vehicles (e.g., trusts, corporate entities and limited liability companies) or through a resecuritization. The firm acts as underwriter of the beneficial interests that are sold to investors. The firm's residential mortgage securitizations are primarily in connection with government agency securitizations.

Beneficial interests issued by securitization entities are debt or equity instruments that give the investors rights to receive all or portions of specified cash inflows to a securitization vehicle and include senior and subordinated interests in principal, interest and/or other cash inflows. The proceeds from the sale of beneficial interests are used to pay the transferor for the financial assets sold to the securitization vehicle or to purchase securities which serve as collateral.

The firm accounts for a securitization as a sale when it has relinquished control over the transferred financial assets. Prior to securitization, the firm generally accounts for assets pending transfer at fair value and therefore does not typically recognize significant gains or losses upon the transfer of assets. Net revenues from underwriting activities are recognized in connection with the sales of the underlying beneficial interests to investors.

For transfers of financial assets that are not accounted for as sales, the assets remain in financial instruments owned and the transfer is accounted for as a collateralized financing, with the related interest expense recognized over the life of the transaction. See Notes 10 and 23 for further information about collateralized financings and interest expense, respectively.

The firm generally receives cash in exchange for the transferred assets but may also have continuing involvement with the transferred financial assets, including ownership of beneficial interests in securitized financial assets, primarily in the form of debt instruments. The firm may also purchase senior or subordinated securities issued by securitization vehicles (which are typically VIEs) in connection with secondary market-making activities.

The primary risks included in beneficial interests and other interests from the firm's continuing involvement with securitization vehicles are the performance of the underlying collateral, the position of the firm's investment in the capital structure of the securitization vehicle and the market yield for the security. These interests primarily are accounted for at fair value and classified in level 2 of the fair value hierarchy. Beneficial interests and other interests not accounted for at fair value are carried at amounts that approximate fair value. See Notes 5 through 8 for further information about fair value measurements.

The table below presents the amount of financial assets securitized and the cash flows received on retained interests in securitization entities in which the firm had continuing involvement as of the end of the period.

	Three Months Ended March	
$ in millions	**2018**	2017
Residential mortgages	**$6,797**	$2,942
Commercial mortgages	**2,039**	1,062
Other financial assets	**234**	–
Total	**$9,070**	$4,004
Retained interests cash flows	**$ 96**	$ 73

The table below presents the firm's continuing involvement in nonconsolidated securitization entities to which the firm sold assets, as well as the total outstanding principal amount of transferred assets in which the firm has continuing involvement.

$ in millions	Outstanding Principal Amount	Retained Interests	Purchased Interests
As of March 2018			
U.S. government agency-issued collateralized mortgage obligations	**$23,497**	**$2,201**	**$26**
Other residential mortgage-backed	**12,687**	**807**	**4**
Other commercial mortgage-backed	**8,795**	**252**	**–**
Corporate debt and other asset-backed	**2,148**	**66**	**1**
Total	**$47,127**	**$3,326**	**$31**
As of December 2017			
U.S. government agency-issued collateralized mortgage obligations	$20,232	$1,120	$16
Other residential mortgage-backed	10,558	711	17
Other commercial mortgage-backed	7,916	228	7
Corporate debt and other asset-backed	2,108	56	1
Total	$40,814	$2,115	$41

In the table above:

- The outstanding principal amount is presented for the purpose of providing information about the size of the securitization entities and is not representative of the firm's risk of loss.
- The firm's risk of loss from retained or purchased interests is limited to the carrying value of these interests.
- Purchased interests represent senior and subordinated interests, purchased in connection with secondary market-making activities, in securitization entities in which the firm also holds retained interests.
- Substantially all of the total outstanding principal amount and total retained interests relate to securitizations during 2012 and thereafter.
- The fair value of retained interests was $3.34 billion and $2.13 billion as of March 2018 and December 2017, respectively.

In addition to the interests in the table above, the firm had other continuing involvement in the form of derivative transactions and commitments with certain nonconsolidated VIEs. The carrying value of these derivatives and commitments was a net asset of $57 million and $86 million as of March 2018 and December 2017, respectively. The notional amounts of these derivatives and commitments are included in maximum exposure to loss in the nonconsolidated VIE table in Note 12.

The table below presents the weighted average key economic assumptions used in measuring the fair value of mortgage-backed retained interests and the sensitivity of this fair value to immediate adverse changes of 10% and 20% in those assumptions.

	As of	
$ in millions	**March 2018**	December 2017
Fair value of retained interests	**$3,271**	$2,071
Weighted average life (years)	**6.5**	6.0
Constant prepayment rate	**9.2%**	9.4%
Impact of 10% adverse change	**$ (41)**	$ (19)
Impact of 20% adverse change	**$ (81)**	$ (35)
Discount rate	**4.2%**	4.2%
Impact of 10% adverse change	**$ (64)**	$ (35)
Impact of 20% adverse change	**$ (126)**	$ (70)

In the table above:

- Amounts do not reflect the benefit of other financial instruments that are held to mitigate risks inherent in these retained interests.
- Changes in fair value based on an adverse variation in assumptions generally cannot be extrapolated because the relationship of the change in assumptions to the change in fair value is not usually linear.
- The impact of a change in a particular assumption is calculated independently of changes in any other assumption. In practice, simultaneous changes in assumptions might magnify or counteract the sensitivities disclosed above.
- The constant prepayment rate is included only for positions for which it is a key assumption in the determination of fair value.
- The discount rate for retained interests that relate to U.S. government agency-issued collateralized mortgage obligations does not include any credit loss. Expected credit loss assumptions are reflected in the discount rate for the remainder of retained interests.

The firm has other retained interests not reflected in the table above with a fair value of $66 million and a weighted average life of 4.6 years as of March 2018, and a fair value of $56 million and a weighted average life of 4.5 years as of December 2017. Due to the nature and fair value of certain of these retained interests, the weighted average assumptions for constant prepayment and discount rates and the related sensitivity to adverse changes are not meaningful as of both March 2018 and December 2017. The firm's maximum exposure to adverse changes in the value of these interests is the carrying value of $66 million and $56 million as of March 2018 and December 2017, respectively.

Note 12.
Variable Interest Entities

A variable interest in a VIE is an investment (e.g., debt or equity securities) or other interest (e.g., derivatives or loans and lending commitments) that will absorb portions of the VIE's expected losses and/or receive portions of the VIE's expected residual returns.

The firm's variable interests in VIEs include senior and subordinated debt; loans and lending commitments; limited and general partnership interests; preferred and common equity; derivatives that may include foreign currency, equity and/or credit risk; guarantees; and certain of the fees the firm receives from investment funds. Certain interest rate, foreign currency and credit derivatives the firm enters into with VIEs are not variable interests because they create, rather than absorb, risk.

VIEs generally finance the purchase of assets by issuing debt and equity securities that are either collateralized by or indexed to the assets held by the VIE. The debt and equity securities issued by a VIE may include tranches of varying levels of subordination. The firm's involvement with VIEs includes securitization of financial assets, as described in Note 11, and investments in and loans to other types of VIEs, as described below. See Note 11 for further information about securitization activities, including the definition of beneficial interests. See Note 3 for the firm's consolidation policies, including the definition of a VIE.

VIE Consolidation Analysis

The enterprise with a controlling financial interest in a VIE is known as the primary beneficiary and consolidates the VIE. The firm determines whether it is the primary beneficiary of a VIE by performing an analysis that principally considers:

- Which variable interest holder has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance;
- Which variable interest holder has the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE;
- The VIE's purpose and design, including the risks the VIE was designed to create and pass through to its variable interest holders;
- The VIE's capital structure;
- The terms between the VIE and its variable interest holders and other parties involved with the VIE; and
- Related-party relationships.

The firm reassesses its evaluation of whether an entity is a VIE when certain reconsideration events occur. The firm reassesses its determination of whether it is the primary beneficiary of a VIE on an ongoing basis based on current facts and circumstances.

VIE Activities

The firm is principally involved with VIEs through the following business activities:

Mortgage-Backed VIEs. The firm sells residential and commercial mortgage loans and securities to mortgage-backed VIEs and may retain beneficial interests in the assets sold to these VIEs. The firm purchases and sells beneficial interests issued by mortgage-backed VIEs in connection with market-making activities. In addition, the firm may enter into derivatives with certain of these VIEs, primarily interest rate swaps, which are typically not variable interests. The firm generally enters into derivatives with other counterparties to mitigate its risk.

Real Estate, Credit- and Power-Related and Other Investing VIEs. The firm purchases equity and debt securities issued by and makes loans to VIEs that hold real estate, performing and nonperforming debt, distressed loans, power-related assets and equity securities. The firm typically does not sell assets to, or enter into derivatives with, these VIEs.

Corporate Debt and Other Asset-Backed VIEs. The firm structures VIEs that issue notes to clients, and purchases and sells beneficial interests issued by corporate debt and other asset-backed VIEs in connection with market-making activities. Certain of these VIEs synthetically create the exposure for the beneficial interests they issue by entering into credit derivatives with the firm, rather than purchasing the underlying assets. In addition, the firm may enter into derivatives, such as total return swaps, with certain corporate debt and other asset-backed VIEs, under which the firm pays the VIE a return due to the beneficial interest holders and receives the return on the collateral owned by the VIE. The collateral owned by these VIEs is primarily other asset-backed loans and securities. The firm generally can be removed as the total return swap counterparty and enters into derivatives with other counterparties to mitigate its risk related to these swaps. The firm may sell assets to the corporate debt and other asset-backed VIEs it structures.

Principal-Protected Note VIEs. The firm structures VIEs that issue principal-protected notes to clients. These VIEs own portfolios of assets, principally with exposure to hedge funds. Substantially all of the principal protection on the notes issued by these VIEs is provided by the asset portfolio rebalancing that is required under the terms of the notes. The firm enters into total return swaps with these VIEs under which the firm pays the VIE the return due to the principal-protected note holders and receives the return on the assets owned by the VIE. The firm may enter into derivatives with other counterparties to mitigate its risk. The firm also obtains funding through these VIEs.

Investments in Funds. The firm makes equity investments in certain of the investment fund VIEs it manages and is entitled to receive fees from these VIEs. The firm typically does not sell assets to, or enter into derivatives with, these VIEs.

Nonconsolidated VIEs

The table below presents a summary of the nonconsolidated VIEs in which the firm holds variable interests. The nature of the firm's variable interests can take different forms, as described in the rows under maximum exposure to loss.

	As of	
$ in millions	**March 2018**	December 2017
Total nonconsolidated VIEs		
Assets in VIEs	**$104,592**	$97,962
Carrying value of variable interests — assets	**9,876**	8,425
Carrying value of variable interests — liabilities	**266**	214
Maximum exposure to loss:		
Retained interests	**3,326**	2,115
Purchased interests	**1,059**	1,172
Commitments and guarantees	**3,087**	3,462
Derivatives	**8,021**	8,406
Loans and investments	**4,977**	4,454
Total maximum exposure to loss	**$ 20,470**	$19,609

In the table above:

- The firm's exposure to the obligations of VIEs is generally limited to its interests in these entities. In certain instances, the firm provides guarantees, including derivative guarantees, to VIEs or holders of variable interests in VIEs.
- The maximum exposure to loss excludes the benefit of offsetting financial instruments that are held to mitigate the risks associated with these variable interests.
- The maximum exposure to loss from retained interests, purchased interests, and loans and investments is the carrying value of these interests.
- The maximum exposure to loss from commitments and guarantees, and derivatives is the notional amount, which does not represent anticipated losses and also has not been reduced by unrealized losses already recorded. As a result, the maximum exposure to loss exceeds liabilities recorded for commitments and guarantees, and derivatives provided to VIEs.
- Total maximum exposure to loss from commitments and guarantees, and derivatives included $1.26 billion as of both March 2018 and December 2017 related to transactions with VIEs to which the firm transferred assets.

The table below disaggregates, by principal business activity, the information for nonconsolidated VIEs included in the summary table above.

	As of	
$ in millions	**March 2018**	December 2017
Mortgage-backed		
Assets in VIEs	**$60,611**	$55,153
Carrying value of variable interests — assets	**4,260**	3,128
Maximum exposure to loss:		
Retained interests	**3,260**	2,059
Purchased interests	**996**	1,067
Commitments and guarantees	**–**	11
Derivatives	**98**	99
Total maximum exposure to loss	**$ 4,354**	$ 3,236
Real estate, credit- and power-related and other investing		
Assets in VIEs	**$18,154**	$15,539
Carrying value of variable interests — assets	**3,403**	3,289
Carrying value of variable interests — liabilities	**2**	2
Maximum exposure to loss:		
Commitments and guarantees	**1,371**	1,617
Loans and investments	**3,403**	3,289
Total maximum exposure to loss	**$ 4,774**	$ 4,906
Corporate debt and other asset-backed		
Assets in VIEs	**$15,051**	$16,251
Carrying value of variable interests — assets	**1,877**	1,660
Carrying value of variable interests — liabilities	**264**	212
Maximum exposure to loss:		
Retained interests	**66**	56
Purchased interests	**63**	105
Commitments and guarantees	**1,632**	1,779
Derivatives	**7,919**	8,303
Loans and investments	**1,238**	817
Total maximum exposure to loss	**$10,918**	$11,060
Investments in funds		
Assets in VIEs	**$10,776**	$11,019
Carrying value of variable interests — assets	**336**	348
Maximum exposure to loss:		
Commitments and guarantees	**84**	55
Derivatives	**4**	4
Loans and investments	**336**	348
Total maximum exposure to loss	**$ 424**	$ 407

As of both March 2018 and December 2017, the carrying values of the firm's variable interests in nonconsolidated VIEs are included in the condensed consolidated statements of financial condition as follows:

- Mortgage-backed: Assets were primarily included in financial instruments owned.
- Real estate, credit- and power-related and other investing: Assets were primarily included in financial instruments owned and liabilities were included in financial instruments sold, but not yet purchased and other liabilities and accrued expenses.
- Corporate debt and other asset-backed: Substantially all assets were included in financial instruments owned and liabilities were included in financial instruments sold, but not yet purchased.
- Investments in funds: Assets were included in financial instruments owned.

Consolidated VIEs

The table below presents a summary of the carrying value and classification of assets and liabilities in consolidated VIEs.

	As of	
$ in millions	**March 2018**	December 2017
Total consolidated VIEs		
Assets		
Cash and cash equivalents	**$ 259**	$ 275
Receivables from customers and counterparties	**2**	2
Loans receivable	**390**	427
Financial instruments owned	**1,158**	1,194
Other assets	**1,153**	1,273
Total	**$2,962**	$3,171
Liabilities		
Other secured financings	**$1,105**	$1,023
Financial instruments sold, but not yet purchased	**10**	15
Unsecured short-term borrowings	**52**	79
Unsecured long-term borrowings	**226**	225
Other liabilities and accrued expenses	**377**	577
Total	**$1,770**	$1,919

In the table above:

- Assets and liabilities are presented net of intercompany eliminations and exclude the benefit of offsetting financial instruments that are held to mitigate the risks associated with the firm's variable interests.
- VIEs in which the firm holds a majority voting interest are excluded if (i) the VIE meets the definition of a business and (ii) the VIE's assets can be used for purposes other than the settlement of its obligations.
- Substantially all assets can only be used to settle obligations of the VIE.

The table below disaggregates, by principal business activity, the information for consolidated VIEs included in the summary table above.

	As of	
$ in millions	**March 2018**	December 2017
Real estate, credit-related and other investing		
Assets		
Cash and cash equivalents	**$ 259**	$ 275
Loans receivable	**336**	375
Financial instruments owned	**892**	896
Other assets	**1,140**	1,267
Total	**$ 2,627**	$ 2,813
Liabilities		
Other secured financings	**$ 397**	$ 327
Financial instruments sold, but not yet purchased	**10**	15
Other liabilities and accrued expenses	**377**	577
Total	**$ 784**	$ 919
Mortgage-backed and other asset-backed		
Assets		
Receivables from customers and counterparties	**$ 2**	$ 2
Loans receivable	**54**	52
Financial instruments owned	**237**	242
Other assets	**13**	6
Total	**$ 306**	$ 302
Liabilities		
Other secured financings	**$ 210**	$ 207
Total	**$ 210**	$ 207
Principal-protected notes		
Assets		
Financial instruments owned	**$ 29**	$ 56
Total	**$ 29**	$ 56
Liabilities		
Other secured financings	**$ 498**	$ 489
Unsecured short-term borrowings	**52**	79
Unsecured long-term borrowings	**226**	225
Total	**$ 776**	$ 793

In the table above:

- The majority of the assets in principal-protected notes VIEs are intercompany and are eliminated in consolidation.
- Creditors and beneficial interest holders of real estate, credit-related and other investing VIEs, and mortgage-backed and other asset-backed VIEs do not have recourse to the general credit of the firm.

Note 13.

Other Assets

Other assets are generally less liquid, nonfinancial assets. The table below presents other assets by type.

	As of	
$ in millions	**March 2018**	December 2017
Property, leasehold improvements and equipment	**$15,777**	$15,094
Goodwill and identifiable intangible assets	**4,049**	4,038
Income tax-related assets	**1,780**	3,728
Miscellaneous receivables and other	**5,803**	5,486
Total	**$27,409**	$28,346

In the table above:

- Property, leasehold improvements and equipment is net of accumulated depreciation and amortization of $8.61 billion and $8.28 billion as of March 2018 and December 2017, respectively. Property, leasehold improvements and equipment included $6.16 billion and $5.97 billion as of March 2018 and December 2017, respectively, related to property, leasehold improvements and equipment that the firm uses in connection with its operations. The remainder is held by investment entities, including VIEs, consolidated by the firm. Substantially all property and equipment is depreciated on a straight-line basis over the useful life of the asset. Leasehold improvements are amortized on a straight-line basis over the useful life of the improvement or the term of the lease, whichever is shorter. Capitalized costs of software developed or obtained for internal use are amortized on a straight-line basis over three years.

- The decrease in income tax-related assets during the first quarter of 2018 primarily reflected a decrease in net current tax receivables, as the net deferred tax liability related to the Tax Legislation repatriation tax became current and was netted against current tax receivables. See Note 24 for further information about Tax Legislation.

- Miscellaneous receivables and other included debt securities accounted for as held-to-maturity of $847 million and $800 million as of March 2018 and December 2017, respectively. These securities were backed by residential real estate, had maturities of greater than ten years, are carried at amortized cost and the carrying value of these securities approximated fair value as of both March 2018 and December 2017. As these securities are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these securities been included in the firm's fair value hierarchy, substantially all would have been classified in level 2 as of both March 2018 and December 2017.

- Miscellaneous receivables and other included investments in qualified affordable housing projects of $662 million and $679 million as of March 2018 and December 2017, respectively.

- Miscellaneous receivables and other included assets classified as held for sale of $591 million and $634 million as of March 2018 and December 2017, respectively, related to certain of the firm's consolidated investments within its Investing & Lending segment, substantially all of which consisted of property and equipment.

- Miscellaneous receivables and other included equity-method investments of $279 million and $275 million as of March 2018 and December 2017, respectively.

Goodwill and Identifiable Intangible Assets

Goodwill. The table below presents the carrying value of goodwill.

	As of	
$ in millions	**March 2018**	December 2017
Investment Banking:		
Financial Advisory	**$ 98**	$ 98
Underwriting	**183**	183
Institutional Client Services:		
FICC Client Execution	**269**	269
Equities client execution	**2,404**	2,403
Securities services	**105**	105
Investing & Lending	**43**	2
Investment Management	**605**	605
Total	**$3,707**	$3,665

Goodwill is the cost of acquired companies in excess of the fair value of net assets, including identifiable intangible assets, at the acquisition date.

Goodwill is assessed for impairment annually in the fourth quarter or more frequently if events occur or circumstances change that indicate an impairment may exist. When assessing goodwill for impairment, first, qualitative factors are assessed to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If the results of the qualitative assessment are not conclusive, a quantitative goodwill test is performed.

The quantitative goodwill test compares the estimated fair value of each reporting unit with its estimated net book value (including goodwill and identifiable intangible assets). If the reporting unit's estimated fair value exceeds its estimated net book value, goodwill is not impaired. An impairment is recognized if the estimated fair value of a reporting unit is less than its estimated net book value. To estimate the fair value of each reporting unit, a relative value technique is used because the firm believes market participants would use this technique to value the firm's reporting units. The relative value technique applies observable price-to-earnings multiples or price-to-book multiples and projected return on equity of comparable competitors to reporting units' net earnings or net book value. The estimated net book value of each reporting unit reflects an allocation of total shareholders' equity and represents the estimated amount of total shareholders' equity required to support the activities of the reporting unit under currently applicable regulatory capital requirements.

In the fourth quarter of 2017, the firm assessed goodwill for impairment for each of its reporting units by performing a qualitative assessment. Multiple factors were assessed with respect to each of the firm's reporting units to determine whether it was more likely than not that the estimated fair value of any of these reporting units was less than its estimated carrying value. The qualitative assessment also considered changes since the prior quantitative tests.

As a result of the qualitative assessment, the firm determined that it was more likely than not that the estimated fair value of each of the reporting units exceeded its respective carrying value. Therefore, the firm determined that goodwill for each reporting unit was not impaired and that a quantitative goodwill test was not required.

There were no events or changes in circumstances during the three months ended March 2018 that would indicate that it was more likely than not that the estimated fair value of each of the reporting units did not exceed its respective estimated carrying value as of March 2018.

Identifiable Intangible Assets. The table below presents the carrying value of identifiable intangible assets.

$ in millions	As of March 2018	As of December 2017
Institutional Client Services:		
FICC Client Execution	**$ 25**	$ 37
Equities client execution	**75**	88
Investing & Lending	**140**	140
Investment Management	**102**	108
Total	**$ 342**	$ 373

The table below presents further details on the net carrying value of identifiable intangible assets.

$ in millions	As of March 2018	As of December 2017
Customer lists		
Gross carrying value	**$ 1,105**	$ 1,091
Accumulated amortization	**(921)**	(903)
Net carrying value	**184**	188
Other		
Gross carrying value	**581**	584
Accumulated amortization	**(423)**	(399)
Net carrying value	**158**	185
Total gross carrying value	**1,686**	1,675
Total accumulated amortization	**(1,344)**	(1,302)
Total net carrying value	**$ 342**	$ 373

In the table above:

- The net carrying value of other intangibles primarily includes intangible assets related to acquired leases.
- During the three months ended March 2018, the firm acquired $34 million of intangible assets, the largest of which related to customer lists, with a weighted average amortization period of three years.
- During 2017, the firm acquired $113 million of intangible assets, primarily related to acquired leases, with a weighted average amortization period of five years.

Substantially all of the firm's identifiable intangible assets are considered to have finite useful lives and are amortized over their estimated useful lives generally using the straight-line method.

The tables below present details about amortization of identifiable intangible assets.

$ in millions	Three Months Ended March 2018	Three Months Ended March 2017
Amortization	**$45**	$41

$ in millions	**As of March 2018**
Estimated future amortization	
Remainder of 2018	**$97**
2019	**$99**
2020	**$42**
2021	**$26**
2022	**$20**
2023	**$17**

Impairments

The firm tests property, leasehold improvements and equipment, identifiable intangible assets and other assets for impairment whenever events or changes in circumstances suggest that an asset's or asset group's carrying value may not be fully recoverable. To the extent the carrying value of an asset exceeds the projected undiscounted cash flows expected to result from the use and eventual disposal of the asset or asset group, the firm determines the asset is impaired and records an impairment equal to the difference between the estimated fair value and the carrying value of the asset or asset group. In addition, the firm will recognize an impairment prior to the sale of an asset if the carrying value of the asset exceeds its estimated fair value.

During the quarters ended March 2018 and March 2017, impairments were not material to the firm's results of operations or financial condition.

Note 14.
Deposits

The table below presents the types and sources of the firm's deposits.

$ in millions	Savings and Demand	Time	Total
As of March 2018			
Private bank deposits	**$52,624**	**$ 1,839**	**$ 54,463**
Marcus deposits	**15,967**	**4,345**	**20,312**
Brokered certificates of deposit	**–**	**38,220**	**38,220**
Deposit sweep programs	**15,960**	**–**	**15,960**
Institutional deposits	**1**	**21,984**	**21,985**
Total	**$84,552**	**$66,388**	**$150,940**
As of December 2017			
Private bank deposits	$50,579	$ 1,623	$ 52,202
Marcus deposits	13,787	3,330	17,117
Brokered certificates of deposit	–	35,704	35,704
Deposit sweep programs	16,019	–	16,019
Institutional deposits	1	17,561	17,562
Total	$80,386	$58,218	$138,604

In the table above:

- Substantially all deposits are interest-bearing.
- Savings and demand accounts consist of money market deposit accounts, negotiable order of withdrawal accounts and demand deposit accounts that have no stated maturity or expiration date.
- Time deposits included $27.54 billion and $22.90 billion as of March 2018 and December 2017, respectively, of deposits accounted for at fair value under the fair value option. See Note 8 for further information about deposits accounted for at fair value.
- Time deposits had a weighted average maturity of approximately 2 years as of both March 2018 and December 2017.
- Deposit sweep programs represent long-term contractual agreements with several U.S. broker-dealers who sweep client cash to FDIC-insured deposits. As of both March 2018 and December 2017, the firm had eight deposit sweep program contractual arrangements.
- Deposits insured by the FDIC as of March 2018 and December 2017 were approximately $80.51 billion and $75.02 billion, respectively.

The table below presents deposits held in U.S. and non-U.S. offices.

	As of	
$ in millions	**March 2018**	December 2017
U.S. offices	**$118,026**	$111,002
Non-U.S. offices	**32,914**	27,602
Total	**$150,940**	$138,604

In the table above, U.S. deposits were held at Goldman Sachs Bank USA (GS Bank USA) and substantially all non-U.S. deposits were held at Goldman Sachs International Bank (GSIB).

The table below presents maturities of time deposits held in U.S. and non-U.S. offices.

	As of March 2018		
$ in millions	**U.S.**	**Non-U.S.**	**Total**
Remainder of 2018	**$11,471**	**$15,384**	**$26,855**
2019	**10,777**	**7,325**	**18,102**
2020	**6,125**	**12**	**6,137**
2021	**3,895**	**44**	**3,939**
2022	**4,829**	**88**	**4,917**
2023	**2,357**	**60**	**2,417**
2024 - thereafter	**3,390**	**631**	**4,021**
Total	**$42,844**	**$23,544**	**$66,388**

As of March 2018, deposits in U.S. and non-U.S. offices included $1.70 billion and $14.34 billion, respectively, of time deposits that were greater than $250,000.

The firm's savings and demand deposits are recorded based on the amount of cash received plus accrued interest, which approximates fair value. In addition, the firm designates certain derivatives as fair value hedges to convert a portion of its time deposits not accounted for at fair value from fixed-rate obligations into floating-rate obligations. The carrying value of time deposits not accounted for at fair value approximated fair value as of both March 2018 and December 2017. While these savings and demand deposits and time deposits are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these deposits been included in the firm's fair value hierarchy, they would have been classified in level 2 as of both March 2018 and December 2017.

Note 15.

Short-Term Borrowings

The table below presents details about the firm's short-term borrowings.

	As of	
$ in millions	**March 2018**	December 2017
Other secured financings (short-term)	**$15,983**	$14,896
Unsecured short-term borrowings	**47,760**	46,922
Total	**$63,743**	$61,818

See Note 10 for information about other secured financings.

Unsecured short-term borrowings includes the portion of unsecured long-term borrowings maturing within one year of the financial statement date and unsecured long-term borrowings that are redeemable within one year of the financial statement date at the option of the holder.

The firm accounts for certain hybrid financial instruments at fair value under the fair value option. See Note 8 for further information about unsecured short-term borrowings that are accounted for at fair value. In addition, the firm designates certain derivatives as fair value hedges to convert a portion of its unsecured short-term borrowings not accounted for at fair value from fixed-rate obligations into floating-rate obligations. The carrying value of unsecured short-term borrowings that are not recorded at fair value generally approximates fair value due to the short-term nature of the obligations. While these unsecured short-term borrowings are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the firm's fair value hierarchy in Notes 6 through 8. Had these borrowings been included in the firm's fair value hierarchy, substantially all would have been classified in level 2 as of both March 2018 and December 2017.

The table below presents details about the firm's unsecured short-term borrowings.

	As of	
$ in millions	**March 2018**	December 2017
Current portion of unsecured long-term borrowings	**$28,134**	$30,090
Hybrid financial instruments	**16,004**	12,973
Other unsecured short-term borrowings	**3,622**	3,859
Total	**$47,760**	$46,922
Weighted average interest rate	**2.70%**	2.28%

In the table above, the weighted average interest rates for these borrowings include the effect of hedging activities and exclude unsecured short-term borrowings accounted for at fair value under the fair value option. See Note 7 for further information about hedging activities.

Note 16.

Long-Term Borrowings

The table below presents details about the firm's long-term borrowings.

	As of	
$ in millions	**March 2018**	December 2017
Other secured financings (long-term)	**$ 10,774**	$ 9,892
Unsecured long-term borrowings	**225,899**	217,687
Total	**$236,673**	$227,579

See Note 10 for information about other secured financings.

The table below presents unsecured long-term borrowings extending through 2067, which consists principally of senior borrowings.

$ in millions	U.S. Dollar	Non-U.S. Dollar	Total
As of March 2018			
Fixed-rate obligations	**$101,771**	**$ 39,603**	**$141,374**
Floating-rate obligations	**48,334**	**36,191**	**84,525**
Total	**$150,105**	**$ 75,794**	**$225,899**
As of December 2017			
Fixed-rate obligations	$104,035	$ 36,975	$141,010
Floating-rate obligations	44,614	32,063	76,677
Total	$148,649	$ 69,038	$217,687

In the table above:

- Floating interest rates are generally based on LIBOR or Euro Interbank Offered Rate. Equity-linked and indexed instruments are included in floating-rate obligations.
- Interest rates on U.S. dollar-denominated debt ranged from 1.95% to 10.04% (with a weighted average rate of 4.15%) and 1.60% to 10.04% (with a weighted average rate of 4.24%) as of March 2018 and December 2017, respectively.
- Interest rates on non-U.S. dollar-denominated debt ranged from 0.31% to 13.00% (with a weighted average rate of 2.54%) and 0.31% to 13.00% (with a weighted average rate of 2.60%) as of March 2018 and December 2017, respectively.

The table below presents unsecured long-term borrowings by maturity date.

$ in millions	As of March 2018
2019	**$ 25,215**
2020	**26,216**
2021	**21,935**
2022	**23,077**
2023	**23,282**
2024 - thereafter	**106,174**
Total	**$225,899**

In the table above:

- Unsecured long-term borrowings maturing within one year of the financial statement date and unsecured long-term borrowings that are redeemable within one year of the financial statement date at the option of the holder are excluded as they are included in unsecured short-term borrowings.
- Unsecured long-term borrowings that are repayable prior to maturity at the option of the firm are reflected at their contractual maturity dates.
- Unsecured long-term borrowings that are redeemable prior to maturity at the option of the holder are reflected at the earliest dates such options become exercisable.
- Unsecured long-term borrowings included $4.65 billion of adjustments to the carrying value of certain unsecured long-term borrowings resulting from the application of hedge accounting by year of maturity as follows: $60 million in 2019, $151 million in 2020, $328 million in 2021, $(87) million in 2022, $(57) million in 2023, and $4.25 billion in 2024 and thereafter.

The firm designates certain derivatives as fair value hedges to convert a portion of its fixed-rate unsecured long-term borrowings not accounted for at fair value into floating-rate obligations. See Note 7 for further information about hedging activities.

The table below presents unsecured long-term borrowings, after giving effect to such hedging activities.

	As of	
$ in millions	March 2018	December 2017
Fixed-rate obligations:		
At fair value	**$ 187**	$ 147
At amortized cost	**88,275**	90,803
Floating-rate obligations:		
At fair value	**40,363**	38,491
At amortized cost	**97,074**	88,246
Total	**$225,899**	$217,687

In the table above, the weighted average interest rates on the aggregate amounts were 2.84% (3.65% related to fixed-rate obligations and 2.11% related to floating-rate obligations) and 2.86% (3.67% related to fixed-rate obligations and 2.02% related to floating-rate obligations) as of March 2018 and December 2017, respectively. These rates exclude unsecured long-term borrowings accounted for at fair value under the fair value option.

As of both March 2018 and December 2017, the carrying value of unsecured long-term borrowings for which the firm did not elect the fair value option approximated fair value. As these borrowings are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP, their fair value is not included in the firm's fair value hierarchy in Notes 6 through 8. Had these borrowings been included in the firm's fair value hierarchy, substantially all would have been classified in level 2 as of both March 2018 and December 2017.

Subordinated Borrowings

Unsecured long-term borrowings includes subordinated debt and junior subordinated debt. Junior subordinated debt is junior in right of payment to other subordinated borrowings, which are junior to senior borrowings. As of both March 2018 and December 2017, subordinated debt had maturities ranging from 2020 to 2045. Subordinated debt that matures within one year is included in unsecured short-term borrowings.

The table below presents details about the firm's subordinated borrowings.

$ in millions	Par Amount	Carrying Amount	Rate
As of March 2018			
Subordinated debt	**$14,405**	**$16,120**	**3.76%**
Junior subordinated debt	**1,140**	**1,433**	**2.35%**
Total	**$15,545**	**$17,553**	**3.66%**
As of December 2017			
Subordinated debt	$14,117	$16,235	3.31%
Junior subordinated debt	1,168	1,539	2.37%
Total	$15,285	$17,774	3.24%

In the table above, the rate is the weighted average interest rate for these borrowings, including the effect of fair value hedges used to convert fixed-rate obligations into floating-rate obligations. See Note 7 for further information about hedging activities. The rates exclude subordinated borrowings accounted for at fair value under the fair value option.

Junior Subordinated Debt

In 2004, Group Inc. issued $2.84 billion of junior subordinated debt to Goldman Sachs Capital I (Trust), a Delaware statutory trust. The Trust issued $2.75 billion of guaranteed preferred beneficial interests (Trust Preferred Securities) to third parties and $85 million of common beneficial interests to Group Inc. and used the proceeds from the issuances to purchase the junior subordinated debt from Group Inc. As of March 2018, the outstanding par amount of junior subordinated debt held by the Trust was $1.14 billion and the outstanding par amount of Trust Preferred Securities and common beneficial interests issued by the Trust was $1.11 billion and $34.1 million, respectively. During the three months ended March 2018, the firm purchased $27.8 million (par amount) of Trust Preferred Securities and delivered these securities, along with $1.0 million of common beneficial interests, to the Trust in exchange for a corresponding par amount of the junior subordinated debt. Following the exchanges, these Trust Preferred Securities, common beneficial interests and junior subordinated debt were extinguished. As of December 2017, the outstanding par amount of junior subordinated debt held by the Trust was $1.17 billion and the outstanding par amount of Trust Preferred Securities and common beneficial interests issued by the Trust was $1.13 billion and $35.1 million, respectively. The Trust is a wholly-owned finance subsidiary of the firm for regulatory and legal purposes but is not consolidated for accounting purposes.

The firm pays interest semi-annually on the junior subordinated debt at an annual rate of 6.345% and the debt matures on February 15, 2034. The coupon rate and the payment dates applicable to the beneficial interests are the same as the interest rate and payment dates for the junior subordinated debt. The firm has the right, from time to time, to defer payment of interest on the junior subordinated debt, and therefore cause payment on the Trust's preferred beneficial interests to be deferred, in each case up to ten consecutive semi-annual periods. During any such deferral period, the firm will not be permitted to, among other things, pay dividends on or make certain repurchases of its common stock. The Trust is not permitted to pay any distributions on the common beneficial interests held by Group Inc. unless all dividends payable on the preferred beneficial interests have been paid in full.

The firm has covenanted in favor of the holders of Group Inc.'s 6.345% junior subordinated debt due February 15, 2034, that, subject to certain exceptions, the firm will not redeem or purchase the capital securities issued by Goldman Sachs Capital II and Goldman Sachs Capital III (APEX Trusts) or shares of Group Inc.'s Perpetual Non-Cumulative Preferred Stock, Series E (Series E Preferred Stock), Perpetual Non-Cumulative Preferred Stock, Series F (Series F Preferred Stock) or Non-Cumulative Preferred Stock, Series O, if the redemption or purchase results in less than $253 million aggregate liquidation preference of that series outstanding, prior to specified dates in 2022 for a price that exceeds a maximum amount determined by reference to the net cash proceeds that the firm has received from the sale of qualifying securities.

The APEX Trusts hold Group Inc.'s Series E Preferred Stock and Series F Preferred Stock. These trusts are Delaware statutory trusts sponsored by the firm and wholly-owned finance subsidiaries of the firm for regulatory and legal purposes but are not consolidated for accounting purposes.

Note 17.
Other Liabilities and Accrued Expenses

The table below presents other liabilities and accrued expenses by type.

	As of	
$ in millions	**March 2018**	December 2017
Compensation and benefits	**$ 4,133**	$ 6,710
Income tax-related liabilities	**2,217**	4,051
Noncontrolling interests	**628**	553
Employee interests in consolidated funds	**145**	156
Subordinated liabilities of consolidated VIEs	**15**	19
Accrued expenses and other	**5,127**	5,433
Total	**$12,265**	$16,922

In the table above:

- The decrease in income tax-related liabilities during the first quarter of 2018 reflected a decrease in the net deferred tax liability related to the Tax Legislation repatriation tax, which became current and was netted against current tax receivables. See Note 24 for further information about Tax Legislation.
- Beginning in January 2018, accrued expenses and other includes contract liabilities, which represent consideration received by the firm, in connection with its contracts with clients, prior to providing the service. As of March 2018, the firm's contract liabilities were not material.

Note 18.

Commitments, Contingencies and Guarantees

Commitments

The table below presents the firm's commitments by type.

	As of	
$ in millions	March 2018	December 2017
Commercial lending:		
Investment-grade	$ 97,859	$ 93,115
Non-investment-grade	46,579	45,291
Warehouse financing	4,624	5,340
Total commitments to extend credit	149,062	143,746
Contingent and forward starting collateralized agreements	66,966	41,756
Forward starting collateralized financings	39,819	16,902
Letters of credit	388	437
Investment commitments	5,351	6,840
Other	9,630	6,310
Total commitments	**$271,216**	$215,991

The table below presents the firm's commitments by period of expiration.

	As of March 2018			
$ in millions	Remainder of 2018	2019 - 2020	2021 - 2022	2023 - Thereafter
Commercial lending:				
Investment-grade	$ 13,351	$39,165	$37,526	$ 7,817
Non-investment-grade	1,641	11,714	20,222	13,002
Warehouse financing	625	2,067	1,359	573
Total commitments to extend credit	15,617	52,946	59,107	21,392
Contingent and forward starting collateralized agreements	66,966	–	–	–
Forward starting collateralized financings	39,819	–	–	–
Letters of credit	193	155	–	40
Investment commitments	1,346	764	920	2,321
Other	9,389	191	50	–
Total commitments	**$133,330**	**$54,056**	**$60,077**	**$23,753**

Commitments to Extend Credit

The firm's commitments to extend credit are agreements to lend with fixed termination dates and depend on the satisfaction of all contractual conditions to borrowing. These commitments are presented net of amounts syndicated to third parties. The total commitment amount does not necessarily reflect actual future cash flows because the firm may syndicate all or substantial additional portions of these commitments. In addition, commitments can expire unused or be reduced or cancelled at the counterparty's request.

As of March 2018 and December 2017, $128.01 billion and $124.50 billion, respectively, of the firm's lending commitments were held for investment and were accounted for on an accrual basis. See Note 9 for further information about such commitments. In addition, as of March 2018 and December 2017, $10.90 billion and $9.84 billion, respectively, of the firm's lending commitments were held for sale and were accounted for at the lower of cost or fair value. The firm accounts for the remaining commitments to extend credit at fair value. Losses, if any, are generally recorded, net of any fees in other principal transactions.

Commercial Lending. The firm's commercial lending commitments are extended to investment-grade and non-investment-grade corporate borrowers. Commitments to investment-grade corporate borrowers are principally used for operating liquidity and general corporate purposes. The firm also extends lending commitments in connection with contingent acquisition financing and other types of corporate lending, as well as commercial real estate financing. Commitments that are extended for contingent acquisition financing are often intended to be short-term in nature, as borrowers often seek to replace them with other funding sources.

Sumitomo Mitsui Financial Group, Inc. (SMFG) provides the firm with credit loss protection on certain approved loan commitments (primarily investment-grade commercial lending commitments). The notional amount of such loan commitments was $25.23 billion and $25.70 billion as of March 2018 and December 2017, respectively. The credit loss protection on loan commitments provided by SMFG is generally limited to 95% of the first loss the firm realizes on such commitments, up to a maximum of approximately $950 million. In addition, subject to the satisfaction of certain conditions, upon the firm's request, SMFG will provide protection for 70% of additional losses on such commitments, up to a maximum of $1.13 billion, of which $550 million of protection had been provided as of both March 2018 and December 2017. The firm also uses other financial instruments to mitigate credit risks related to certain commitments not covered by SMFG. These instruments primarily include credit default swaps that reference the same or similar underlying instrument or entity, or credit default swaps that reference a market index.

Warehouse Financing. The firm provides financing to clients who warehouse financial assets. These arrangements are secured by the warehoused assets, primarily consisting of retail and corporate loans.

Contingent and Forward Starting Collateralized Agreements / Forward Starting Collateralized Financings

Contingent and forward starting collateralized agreements includes resale and securities borrowing agreements, and forward starting collateralized financings includes repurchase and secured lending agreements that settle at a future date, generally within three business days. The firm also enters into commitments to provide contingent financing to its clients and counterparties through resale agreements. The firm's funding of these commitments depends on the satisfaction of all contractual conditions to the resale agreement and these commitments can expire unused.

Letters of Credit

The firm has commitments under letters of credit issued by various banks which the firm provides to counterparties in lieu of securities or cash to satisfy various collateral and margin deposit requirements.

Investment Commitments

Investment commitments includes commitments to invest in private equity, real estate and other assets directly and through funds that the firm raises and manages. Investment commitments included $2.09 billion as of both March 2018 and December 2017, related to commitments to invest in funds managed by the firm. If these commitments are called, they would be funded at market value on the date of investment.

Leases

The firm has contractual obligations under long-term noncancelable lease agreements for office space expiring on various dates through 2069. Certain agreements are subject to periodic escalation provisions for increases in real estate taxes and other charges.

The table below presents future minimum rental payments, net of minimum sublease rentals.

$ in millions	As of March 2018
Remainder of 2018	**$ 234**
2019	**302**
2020	**286**
2021	**228**
2022	**167**
2023	**133**
2024 - thereafter	**958**
Total	**$2,308**

Rent charged to operating expense was $71 million and $70 million for the three months ended March 2018 and March 2017, respectively.

Operating leases include office space held in excess of current requirements. Rent expense relating to space held for growth is included in occupancy expenses. The firm records a liability, based on the fair value of the remaining lease rentals reduced by any potential or existing sublease rentals, for leases where the firm has ceased using the space and management has concluded that the firm will not derive any future economic benefits. Costs to terminate a lease before the end of its term are recognized and measured at fair value on termination. Total occupancy expenses for space held in excess of the firm's current requirements and exit costs related to office space were not material for both the three months ended March 2018 and March 2017.

Contingencies

Legal Proceedings. See Note 27 for information about legal proceedings, including certain mortgage-related matters, and agreements the firm has entered into to toll the statute of limitations.

Certain Mortgage-Related Contingencies. There are multiple areas of focus by regulators, governmental agencies and others within the mortgage market that may impact originators, issuers, servicers and investors. There remains significant uncertainty surrounding the nature and extent of any potential exposure for participants in this market.

The firm has not been a significant originator of residential mortgage loans. The firm did purchase loans originated by others and generally received loan-level representations. During the period 2005 through 2008, the firm sold approximately $10 billion of loans to government-sponsored enterprises and approximately $11 billion of loans to other third parties. In addition, the firm transferred $125 billion of loans to trusts and other mortgage securitization vehicles. In connection with both sales of loans and securitizations, the firm provided loan-level representations and/or assigned the loan-level representations from the party from whom the firm purchased the loans.

The firm's exposure to claims for repurchase of residential mortgage loans based on alleged breaches of representations will depend on a number of factors such as the extent to which these claims are made within the statute of limitations, taking into consideration the agreements to toll the statute of limitations the firm entered into with trustees representing certain trusts. Based upon the large number of defaults in residential mortgages, including those sold or securitized by the firm, there is a potential for repurchase claims. However, the firm is not in a position to make a meaningful estimate of that exposure at this time.

Other Contingencies. In connection with the sale of Metro International Trade Services (Metro), the firm agreed to provide indemnities to the buyer, which primarily relate to fundamental representations and warranties, and potential liabilities for legal or regulatory proceedings arising out of the conduct of Metro's business while the firm owned it.

In connection with the settlement agreement with the Residential Mortgage-Backed Securities Working Group of the U.S. Financial Fraud Enforcement Task Force, the firm agreed to provide $1.80 billion in consumer relief in the form of principal forgiveness for underwater homeowners and distressed borrowers; financing for construction, rehabilitation and preservation of affordable housing; and support for debt restructuring, foreclosure prevention and housing quality improvement programs, as well as land banks.

Guarantees

The table below presents information about certain derivatives that meet the definition of a guarantee, securities lending indemnifications and certain other financial guarantees.

$ in millions	Derivatives	Securities lending indemnifications	Other financial guarantees
As of March 2018			
Carrying Value of Net Liability	**$ 6,750**	**$ –**	**$ 25**
Maximum Payout/Notional Amount by Period of Expiration			
Remainder of 2018	**$1,433,695**	**$38,968**	**$ 702**
2019 - 2020	**890,410**	**–**	**1,429**
2021 - 2022	**144,800**	**–**	**1,322**
2023 - thereafter	**88,859**	**–**	**169**
Total	**$2,557,764**	**$38,968**	**$3,622**
As of December 2017			
Carrying Value of Net Liability	$ 5,406	$ –	$ 37
Maximum Payout/Notional Amount by Period of Expiration			
2018	$1,139,751	$37,959	$ 723
2019 - 2020	205,983	–	1,515
2021 - 2022	71,599	–	1,209
2023 - thereafter	76,540	–	137
Total	$1,493,873	$37,959	$3,584

In the table above:

- The maximum payout is based on the notional amount of the contract and does not represent anticipated losses.
- Amounts exclude certain commitments to issue standby letters of credit that are included in commitments to extend credit. See the tables in "Commitments" above for a summary of the firm's commitments.
- The carrying value for derivatives included derivative assets of $2.08 billion and $2.20 billion and derivative liabilities of $8.83 billion and $7.61 billion as of March 2018 and December 2017, respectively.

Derivative Guarantees. The firm enters into various derivatives that meet the definition of a guarantee under U.S. GAAP, including written equity and commodity put options, written currency contracts and interest rate caps, floors and swaptions. These derivatives are risk managed together with derivatives that do not meet the definition of a guarantee, and therefore the amounts in the table above do not reflect the firm's overall risk related to its derivative activities. Disclosures about derivatives are not required if they may be cash settled and the firm has no basis to conclude it is probable that the counterparties held the underlying instruments at inception of the contract. The firm has concluded that these conditions have been met for certain large, internationally active commercial and investment bank counterparties, central clearing counterparties and certain other counterparties. Accordingly, the firm has not included such contracts in the table above. In addition, see Note 7 for information about credit derivatives that meet the definition of a guarantee, which are not included in the table above.

Derivatives are accounted for at fair value and therefore the carrying value is considered the best indication of payment/performance risk for individual contracts. However, the carrying values in the table above exclude the effect of counterparty and cash collateral netting.

Securities Lending Indemnifications. The firm, in its capacity as an agency lender, indemnifies most of its securities lending customers against losses incurred in the event that borrowers do not return securities and the collateral held is insufficient to cover the market value of the securities borrowed. Collateral held by the lenders in connection with securities lending indemnifications was $40.16 billion and $39.03 billion as of March 2018 and December 2017, respectively. Because the contractual nature of these arrangements requires the firm to obtain collateral with a market value that exceeds the value of the securities lent to the borrower, there is minimal performance risk associated with these guarantees.

Other Financial Guarantees. In the ordinary course of business, the firm provides other financial guarantees of the obligations of third parties (e.g., standby letters of credit and other guarantees to enable clients to complete transactions and fund-related guarantees). These guarantees represent obligations to make payments to beneficiaries if the guaranteed party fails to fulfill its obligation under a contractual arrangement with that beneficiary.

Guarantees of Securities Issued by Trusts. The firm has established trusts, including Goldman Sachs Capital I, the APEX Trusts and other entities for the limited purpose of issuing securities to third parties, lending the proceeds to the firm and entering into contractual arrangements with the firm and third parties related to this purpose. The firm does not consolidate these entities. See Note 16 for further information about the transactions involving Goldman Sachs Capital I and the APEX Trusts.

The firm effectively provides for the full and unconditional guarantee of the securities issued by these entities. Timely payment by the firm of amounts due to these entities under the guarantee, borrowing, preferred stock and related contractual arrangements will be sufficient to cover payments due on the securities issued by these entities.

Management believes that it is unlikely that any circumstances will occur, such as nonperformance on the part of paying agents or other service providers, that would make it necessary for the firm to make payments related to these entities other than those required under the terms of the guarantee, borrowing, preferred stock and related contractual arrangements and in connection with certain expenses incurred by these entities.

Indemnities and Guarantees of Service Providers. In the ordinary course of business, the firm indemnifies and guarantees certain service providers, such as clearing and custody agents, trustees and administrators, against specified potential losses in connection with their acting as an agent of, or providing services to, the firm or its affiliates.

The firm may also be liable to some clients or other parties for losses arising from its custodial role or caused by acts or omissions of third-party service providers, including sub-custodians and third-party brokers. In certain cases, the firm has the right to seek indemnification from these third-party service providers for certain relevant losses incurred by the firm. In addition, the firm is a member of payment, clearing and settlement networks, as well as securities exchanges around the world that may require the firm to meet the obligations of such networks and exchanges in the event of member defaults and other loss scenarios.

In connection with the firm's prime brokerage and clearing businesses, the firm agrees to clear and settle on behalf of its clients the transactions entered into by them with other brokerage firms. The firm's obligations in respect of such transactions are secured by the assets in the client's account, as well as any proceeds received from the transactions cleared and settled by the firm on behalf of the client. In connection with joint venture investments, the firm may issue loan guarantees under which it may be liable in the event of fraud, misappropriation, environmental liabilities and certain other matters involving the borrower.

The firm is unable to develop an estimate of the maximum payout under these guarantees and indemnifications. However, management believes that it is unlikely the firm will have to make any material payments under these arrangements, and no material liabilities related to these guarantees and indemnifications have been recognized in the condensed consolidated statements of financial condition as of both March 2018 and December 2017.

Other Representations, Warranties and Indemnifications. The firm provides representations and warranties to counterparties in connection with a variety of commercial transactions and occasionally indemnifies them against potential losses caused by the breach of those representations and warranties. The firm may also provide indemnifications protecting against changes in or adverse application of certain U.S. tax laws in connection with ordinary-course transactions such as securities issuances, borrowings or derivatives.

In addition, the firm may provide indemnifications to some counterparties to protect them in the event additional taxes are owed or payments are withheld, due either to a change in or an adverse application of certain non-U.S. tax laws.

These indemnifications generally are standard contractual terms and are entered into in the ordinary course of business. Generally, there are no stated or notional amounts included in these indemnifications, and the contingencies triggering the obligation to indemnify are not expected to occur. The firm is unable to develop an estimate of the maximum payout under these guarantees and indemnifications. However, management believes that it is unlikely the firm will have to make any material payments under these arrangements, and no material liabilities related to these arrangements have been recognized in the condensed consolidated statements of financial condition as of both March 2018 and December 2017.

Guarantees of Subsidiaries. Group Inc. fully and unconditionally guarantees the securities issued by GS Finance Corp., a wholly-owned finance subsidiary of the firm. Group Inc. has guaranteed the payment obligations of Goldman Sachs & Co. LLC (GS&Co.) and GS Bank USA, subject to certain exceptions.

In addition, Group Inc. guarantees many of the obligations of its other consolidated subsidiaries on a transaction-by-transaction basis, as negotiated with counterparties. Group Inc. is unable to develop an estimate of the maximum payout under its subsidiary guarantees; however, because these guaranteed obligations are also obligations of consolidated subsidiaries, Group Inc.'s liabilities as guarantor are not separately disclosed.

Note 19.

Shareholders' Equity

Common Equity

As of both March 2018 and December 2017, the firm had 4.00 billion authorized shares of common stock and 200 million authorized shares of nonvoting common stock, each with a par value of $0.01 per share.

On April 16, 2018, the Board of Directors of Group Inc. (Board) increased the firm's quarterly dividend to $0.80 per common share from $0.75 per common share. The dividend will be paid on June 28, 2018 to common shareholders of record on May 31, 2018.

The firm's share repurchase program is intended to help maintain the appropriate level of common equity. The share repurchase program is effected primarily through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), the amounts and timing of which are determined primarily by the firm's current and projected capital position, and capital deployment opportunities, but which may also be influenced by general market conditions and the prevailing price and trading volumes of the firm's common stock. Prior to repurchasing common stock, the firm must receive confirmation that the FRB does not object to such capital action.

The table below presents the amount of common stock repurchased by the firm under the share repurchase program.

in millions, except per share amounts	Three Months Ended March 2018
Common share repurchases	**3.0**
Average cost per share	**$264.32**
Total cost of common share repurchases	**$ 800**

Pursuant to the terms of certain share-based compensation plans, employees may remit shares to the firm or the firm may cancel share-based awards to satisfy minimum statutory employee tax withholding requirements and the exercise price of stock options. Under these plans, during the three months ended March 2018, 1,120 shares were remitted with a total value of $0.3 million and the firm cancelled 4.2 million share-based awards with a total value of $1.07 billion.

Preferred Equity

The tables below present details about the perpetual preferred stock issued and outstanding as of March 2018.

Series	Shares Authorized	Shares Issued	Shares Outstanding	Depositary Shares Per Share
A	50,000	30,000	29,999	1,000
B	50,000	6,000	6,000	1,000
C	25,000	8,000	8,000	1,000
D	60,000	54,000	53,999	1,000
E	17,500	7,667	7,667	N/A
F	5,000	1,615	1,615	N/A
J	46,000	40,000	40,000	1,000
K	32,200	28,000	28,000	1,000
L	52,000	52,000	52,000	25
M	80,000	80,000	80,000	25
N	31,050	27,000	27,000	1,000
O	26,000	26,000	26,000	25
P	66,000	60,000	60,000	25
Total	**540,750**	**420,282**	**420,280**	

Series	Earliest Redemption Date	Liquidation Preference	Redemption Value *($ in millions)*
A	Currently redeemable	$ 25,000	**$ 750**
B	Currently redeemable	$ 25,000	**150**
C	Currently redeemable	$ 25,000	**200**
D	Currently redeemable	$ 25,000	**1,350**
E	Currently redeemable	$100,000	**767**
F	Currently redeemable	$100,000	**161**
J	May 10, 2023	$ 25,000	**1,000**
K	May 10, 2024	$ 25,000	**700**
L	May 10, 2019	$ 25,000	**1,300**
M	May 10, 2020	$ 25,000	**2,000**
N	May 10, 2021	$ 25,000	**675**
O	November 10, 2026	$ 25,000	**650**
P	November 10, 2022	$ 25,000	**1,500**
Total			**$11,203**

In the tables above:

- All shares have a par value of $0.01 per share and, where applicable, each share is represented by the specified number of depositary shares.
- The earliest redemption date represents the date on which each share of non-cumulative Preferred Stock is redeemable at the firm's option.
- Prior to redeeming preferred stock, the firm must receive confirmation that the FRB does not object to such action.

- The redemption price per share for Series A through F Preferred Stock is the liquidation preference plus declared and unpaid dividends. The redemption price per share for Series J through P Preferred Stock is the liquidation preference plus accrued and unpaid dividends. Each share of non-cumulative Series E and Series F Preferred Stock issued and outstanding is redeemable at the firm's option, subject to certain covenant restrictions governing the firm's ability to redeem the preferred stock without issuing common stock or other instruments with equity-like characteristics. See Note 16 for information about the replacement capital covenants applicable to the Series E and Series F Preferred Stock.
- All series of preferred stock are pari passu and have a preference over the firm's common stock on liquidation.
- The firm's ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, its common stock is subject to certain restrictions in the event that the firm fails to pay or set aside full dividends on the preferred stock for the latest completed dividend period.

In November 2017, the firm redeemed the 34,000 shares of Series I 5.95% Non-Cumulative Preferred Stock (Series I Preferred Stock) for the stated redemption price of $850 million ($25,000 per share), plus accrued and unpaid dividends. The difference between the redemption value of the Series I Preferred Stock and the net carrying value at the time of redemption was $14 million. This difference was recorded as an addition to preferred stock dividends in 2017.

In February 2018, the firm redeemed 26,000 shares of its outstanding Series B 6.20% Non-Cumulative Preferred Stock (Series B Preferred Stock) with a redemption value of $650 million ($25,000 per share). The difference between the redemption value of the Series B Preferred Stock and the net carrying value at the time of redemption was $15 million. This difference was recorded as an addition to preferred stock dividends in the first quarter of 2018.

The table below presents the dividend rates of the firm's perpetual preferred stock as of March 2018.

Series	Per Annum Dividend Rate
A	3 month LIBOR + 0.75%, with floor of 3.75%, payable quarterly
B	6.20%, payable quarterly
C	3 month LIBOR + 0.75%, with floor of 4.00%, payable quarterly
D	3 month LIBOR + 0.67%, with floor of 4.00%, payable quarterly
E	3 month LIBOR + 0.77%, with floor of 4.00%, payable quarterly
F	3 month LIBOR + 0.77%, with floor of 4.00%, payable quarterly
J	5.50% to, but excluding, May 10, 2023; 3 month LIBOR + 3.64% thereafter, payable quarterly
K	6.375% to, but excluding, May 10, 2024; 3 month LIBOR + 3.55% thereafter, payable quarterly
L	5.70%, payable semi-annually, from issuance date to, but excluding, May 10, 2019; 3 month LIBOR + 3.884%, payable quarterly, thereafter
M	5.375%, payable semi-annually, from issuance date to, but excluding, May 10, 2020; 3 month LIBOR + 3.922%, payable quarterly, thereafter
N	6.30%, payable quarterly
O	5.30%, payable semi-annually, from issuance date to, but excluding, November 10, 2026; 3 month LIBOR + 3.834%, payable quarterly, thereafter
P	5.00%, payable semi-annually, from issuance date to, but excluding, November 10, 2022; 3 month LIBOR + 2.874%, payable quarterly, thereafter

In the table above, dividends on each series of preferred stock are payable in arrears for the periods specified.

The table below presents dividends declared on the firm's preferred stock.

	Three Months Ended March			
	2018		2017	
Series	***per share***	***$ in millions***	*per share*	*$ in millions*
A	**$ 244.79**	**$ 7**	$ 239.58	$ 7
B	**$ 387.50**	**12**	$ 387.50	12
C	**$ 261.11**	**2**	$ 255.56	2
D	**$ 261.11**	**14**	$ 255.56	14
E	**$1,000.00**	**8**	$1,000.00	7
F	**$1,000.00**	**2**	$1,000.00	2
I	**$ –**	**–**	$ 371.88	13
J	**$ 343.75**	**14**	$ 343.75	14
K	**$ 398.44**	**11**	$ 398.44	11
N	**$ 393.75**	**10**	$ 393.75	11
Total		**$80**		$93

Accumulated Other Comprehensive Loss

The table below presents changes in the accumulated other comprehensive loss, net of tax, by type.

$ in millions	Beginning balance	Other comprehensive income/(loss) adjustments, net of tax	Ending balance
Three Months Ended March 2018			
Currency translation	**$ (625)**	**$ 2**	**$ (623)**
Debt valuation adjustment	**(1,046)**	**270**	**(776)**
Pension and postretirement liabilities	**(200)**	**(4)**	**(204)**
Available-for-sale securities	**(9)**	**(158)**	**(167)**
Total	**$(1,880)**	**$ 110**	**$(1,770)**
Year Ended December 2017			
Currency translation	$ (647)	$ 22	$ (625)
Debt valuation adjustment	(239)	(807)	(1,046)
Pension and postretirement liabilities	(330)	130	(200)
Available-for-sale securities	–	(9)	(9)
Total	$(1,216)	$(664)	$(1,880)

Note 20.

Regulation and Capital Adequacy

The FRB is the primary regulator of Group Inc., a bank holding company (BHC) under the U.S. Bank Holding Company Act of 1956 and a financial holding company under amendments to this Act. As a BHC, the firm is subject to consolidated regulatory capital requirements which are calculated in accordance with the regulations of the FRB (Capital Framework).

The capital requirements are expressed as risk-based capital and leverage ratios that compare measures of regulatory capital to risk-weighted assets (RWAs), average assets and off-balance-sheet exposures. Failure to comply with these capital requirements could result in restrictions being imposed by the firm's regulators and could limit the firm's ability to distribute capital, including share repurchases and dividend payments, and to make certain discretionary compensation payments. The firm's capital levels are also subject to qualitative judgments by the regulators about components of capital, risk weightings and other factors. Furthermore, certain of the firm's subsidiaries are subject to separate regulations and capital requirements.

Capital Framework

The regulations under the Capital Framework are largely based on the Basel Committee on Banking Supervision's (Basel Committee) capital framework for strengthening international capital standards (Basel III) and also implement certain provisions of the Dodd-Frank Act. Under the Capital Framework, the firm is an "Advanced approach" banking organization and has been designated as a global systemically important bank (G-SIB).

The Capital Framework includes risk-based capital buffers that phase in ratably, becoming fully effective on January 1, 2019. The Capital Framework also requires deductions from regulatory capital that phased in ratably per year from 2014 to 2018. In addition, junior subordinated debt issued to trusts will be fully phased out of regulatory capital by 2022.

The firm calculates its Common Equity Tier 1 (CET1), Tier 1 capital and Total capital ratios in accordance with (i) the Standardized approach and market risk rules set out in the Capital Framework (together, the Standardized Capital Rules) and (ii) the Advanced approach and market risk rules set out in the Capital Framework (together, the Basel III Advanced Rules). The lower of each risk-based capital ratio calculated in (i) and (ii) is the ratio against which the firm's compliance with its minimum risk-based ratio requirements is assessed. Under the Capital Framework, the firm is also subject to Tier 1 leverage requirements established by the FRB. The Capital Framework also introduced a supplementary leverage ratio (SLR) which became effective January 1, 2018.

Minimum Ratios and Buffers. The table below presents the minimum ratios applicable to the firm.

	As of	
	March 2018	December 2017
Risk-based capital ratios		
CET1 ratio	**8.250%**	7.000%
Tier 1 capital ratio	**9.750%**	8.500%
Total capital ratio	**11.750%**	10.500%
Leverage ratios		
Tier 1 leverage ratio	**4.000%**	4.000%
SLR	**5.000%**	N/A

In the table above:

- The minimum risk-based capital ratios as of March 2018 reflect (i) the 75% phase-in of the capital conservation buffer of 2.5%, (ii) the 75% phase-in of the G-SIB buffer of 2.5% (based on 2016 financial data), and (iii) the countercyclical capital buffer of zero percent, each described below.
- The minimum risk-based capital ratios as of December 2017 reflect (i) the 50% phase-in of the capital conservation buffer of 2.5%, (ii) the 50% phase-in of the G-SIB buffer of 2.5% (based on 2015 financial data), and (iii) the countercyclical capital buffer of zero percent, each described below.
- The minimum SLR as of March 2018 reflects the 2% buffer applicable to G-SIBs.

The capital conservation buffer, which consists entirely of capital that qualifies as CET1, began to phase in on January 1, 2016 and will continue to do so in increments of 0.625% per year until it reaches 2.5% of RWAs on January 1, 2019.

The G-SIB buffer, which is an extension of the capital conservation buffer, phases in ratably, beginning on January 1, 2016, becoming fully effective on January 1, 2019, and must consist entirely of capital that qualifies as CET1. The buffer must be calculated using two methodologies, the higher of which is reflected in the firm's minimum risk-based capital ratios. The first calculation is based upon the Basel Committee's methodology which, among other factors, relies upon measures of the size, activity and complexity of each G-SIB. The second calculation uses similar inputs, but it includes a measure of reliance on short-term wholesale funding. The firm's G-SIB buffer will be updated annually based on financial data from the prior year, and will be generally applicable for the following year.

The Capital Framework also provides for a countercyclical capital buffer, which is an extension of the capital conservation buffer, of up to 2.5% (consisting entirely of CET1) intended to counteract systemic vulnerabilities. As of March 2018, the FRB has set the countercyclical capital buffer at zero percent.

Definition of Risk-Weighted Assets. RWAs are calculated in accordance with both the Standardized Capital Rules and the Basel III Advanced Rules. The following is a comparison of RWA calculations under these rules:

- RWAs for credit risk in accordance with the Standardized Capital Rules are calculated in a different manner than the Basel III Advanced Rules. The primary difference is that the Standardized Capital Rules do not contemplate the use of internal models to compute exposure for credit risk on derivatives and securities financing transactions, whereas the Basel III Advanced Rules permit the use of such models, subject to supervisory approval. In addition, credit RWAs calculated in accordance with the Standardized Capital Rules utilize prescribed risk-weights which depend largely on the type of counterparty, rather than on internal assessments of the creditworthiness of such counterparties;
- RWAs for market risk in accordance with the Standardized Capital Rules and the Basel III Advanced Rules are generally consistent; and
- RWAs for operational risk are not required by the Standardized Capital Rules, whereas the Basel III Advanced Rules do include such a requirement.

Credit Risk

Credit RWAs are calculated based upon measures of exposure, which are then risk weighted. The following is a description of the calculation of credit RWAs in accordance with the Standardized Capital Rules and the Basel III Advanced Rules:

- For credit RWAs calculated in accordance with the Standardized Capital Rules, the firm utilizes prescribed risk-weights which depend largely on the type of counterparty (e.g., whether the counterparty is a sovereign, bank, broker-dealer or other entity). The exposure measure for derivatives is based on a combination of positive net current exposure and a percentage of the notional amount of each derivative. The exposure measure for securities financing transactions is calculated to reflect adjustments for potential price volatility, the size of which depends on factors such as the type and maturity of the security, and whether it is denominated in the same currency as the other side of the financing transaction. The firm utilizes specific required formulaic approaches to measure exposure for securitizations and equities; and
- For credit RWAs calculated in accordance with the Basel III Advanced Rules, the firm has been given permission by its regulators to compute risk-weights for wholesale and retail credit exposures in accordance with the Advanced Internal Ratings-Based approach. This approach is based on internal assessments of the creditworthiness of counterparties, with key inputs being the probability of default, loss given default and the effective maturity. The firm utilizes internal models to measure exposure for derivatives and securities financing transactions. The Capital Framework requires that a BHC obtain prior written agreement from its regulators before using internal models for such purposes. The firm utilizes specific required formulaic approaches to measure exposure for securitizations and equities.

Market Risk

Market RWAs are calculated based on measures of exposure which include Value-at-Risk (VaR), stressed VaR, incremental risk and comprehensive risk based on internal models, and a standardized measurement method for specific risk. The market risk regulatory capital rules require that a BHC obtain prior written agreement from its regulators before using any internal model to calculate its risk-based capital requirement. The following is further information regarding the measures of exposure for market RWAs calculated in accordance with the Standardized Capital Rules and Basel III Advanced Rules:

- VaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, due to adverse market movements over a defined time horizon with a specified confidence level. For both risk management purposes and regulatory capital calculations the firm uses a single VaR model which captures risks including those related to interest rates, equity prices, currency rates and commodity prices. However, VaR used for regulatory capital requirements (regulatory VaR) differs from risk management VaR due to different time horizons and confidence levels (10-day and 99% for regulatory VaR vs. one-day and 95% for risk management VaR), as well as differences in the scope of positions on which VaR is calculated. In addition, the daily net revenues used to determine risk management VaR exceptions (i.e., comparing the daily net revenues to the VaR measure calculated as of the end of the prior business day) include intraday activity, whereas the FRB's regulatory capital rules require that intraday activity be excluded from daily net revenues when calculating regulatory VaR exceptions. Intraday activity includes bid/offer net revenues, which are more likely than not to be positive by their nature. As a result, there may be differences in the number of VaR exceptions and the amount of daily net revenues calculated for regulatory VaR compared to the amounts calculated for risk management VaR. The firm's positional losses observed on a single day did not exceed its 99% one-day regulatory VaR during the three months ended March 2018 or during the year ended December 2017. There was no change in the VaR multiplier used to calculate Market RWAs;
- Stressed VaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, during a period of significant market stress;
- Incremental risk is the potential loss in value of non-securitized inventory positions due to the default or credit migration of issuers of financial instruments over a one-year time horizon;
- Comprehensive risk is the potential loss in value, due to price risk and defaults, within the firm's credit correlation positions; and
- Specific risk is the risk of loss on a position that could result from factors other than broad market movements, including event risk, default risk and idiosyncratic risk. The standardized measurement method is used to determine specific risk RWAs, by applying supervisory defined risk-weighting factors after applicable netting is performed.

Operational Risk

Operational RWAs are only required to be included under the Basel III Advanced Rules. The firm has been given permission by its regulators to calculate operational RWAs in accordance with the "Advanced Measurement Approach," and therefore utilizes an internal risk-based model to quantify Operational RWAs.

Consolidated Regulatory Capital Ratios

Risk-based Capital Ratios and RWAs. Each of the risk-based capital ratios calculated in accordance with the Basel III Advanced Rules was lower than that calculated in accordance with the Standardized Capital Rules and therefore the Basel III Advanced ratios were the ratios that applied to the firm as of both March 2018 and December 2017.

The table below presents the ratios calculated in accordance with both the Standardized Capital Rules and Basel III Advanced Rules.

	As of	
$ in millions	**March 2018**	December 2017
Common shareholders' equity	**$ 72,376**	$ 70,390
Deduction for goodwill and identifiable intangible assets, net of deferred tax liabilities	**(3,349)**	(3,269)
Other adjustments	**(387)**	(11)
Common Equity Tier 1	**68,640**	67,110
Preferred stock	**11,203**	11,853
Deduction for investments in covered funds	**(607)**	(590)
Other adjustments	**(25)**	(42)
Tier 1 capital	**$ 79,211**	$ 78,331
Standardized Tier 2 and Total capital		
Tier 1 capital	**$ 79,211**	$ 78,331
Qualifying subordinated debt	**13,596**	13,360
Junior subordinated debt issued to trusts	**442**	567
Allowance for losses on loans and lending commitments	**1,019**	1,078
Other adjustments	**(20)**	(28)
Standardized Tier 2 capital	**15,037**	14,977
Standardized Total capital	**$ 94,248**	$ 93,308
Basel III Advanced Tier 2 and Total capital		
Tier 1 capital	**$ 79,211**	$ 78,331
Standardized Tier 2 capital	**15,037**	14,977
Allowance for losses on loans and lending commitments	**(1,019)**	(1,078)
Basel III Advanced Tier 2 capital	**14,018**	13,899
Basel III Advanced Total capital	**$ 93,229**	$ 92,230
RWAs		
Standardized	**$566,515**	$555,611
Basel III Advanced	**$616,904**	$617,646
CET1 ratio		
Standardized	**12.1%**	12.1%
Basel III Advanced	**11.1%**	10.9%
Tier 1 capital ratio		
Standardized	**14.0%**	14.1%
Basel III Advanced	**12.8%**	12.7%
Total capital ratio		
Standardized	**16.6%**	16.8%
Basel III Advanced	**15.1%**	14.9%

Effective January 2018, the firm became subject to CET1 ratios calculated on a fully phased-in basis. As of December 2017, the firm's CET1 ratios calculated in accordance with the Standardized Capital Rules and Basel III Advanced Rules on a fully phased-in basis were 0.2 percentage points lower than on a transitional basis.

In the table above:

- Deduction for goodwill and identifiable intangible assets, net of deferred tax liabilities, included goodwill of $3.71 billion and $3.67 billion as of March 2018 and December 2017, respectively, and identifiable intangible assets of $342 million and $298 million (80% of $373 million) as of March 2018 and December 2017, respectively, net of associated deferred tax liabilities of $700 million and $694 million as of March 2018 and December 2017, respectively. Goodwill is fully deducted from CET1, while the deduction for identifiable intangible assets was fully phased in to CET1 in January 2018. As of December 2017, CET1 reflects 80% of the identifiable intangible assets deduction. The balance that was not deducted during the transitional period was risk weighted.
- Deduction for investments in covered funds represents the firm's aggregate investments in applicable covered funds, excluding investments that are subject to an extended conformance period. See Note 6 for further information about the Volcker Rule.
- Other adjustments within CET1 and Tier 1 capital primarily include credit valuation adjustments on derivative liabilities, pension and postretirement liabilities, the overfunded portion of the firm's defined benefit pension plan obligation net of associated deferred tax liabilities, disallowed deferred tax assets, debt valuation adjustments and other required credit risk-based deductions. The deduction for such items was fully phased in to CET1 in January 2018. As of December 2017, CET1 reflects 80% of such deduction. Substantially all of the balance that was not deducted from CET1 as of December 2017 was deducted from Tier 1 capital within other adjustments.
- As of March 2018, junior subordinated debt issued to trusts was fully phased out of Tier 1 capital, with 40% included in Tier 2 capital and 60% fully phased out of regulatory capital. As of December 2017, junior subordinated debt issued to trusts was fully phased out of Tier 1 capital, with 50% included in Tier 2 capital and 50% fully phased out of regulatory capital. Junior subordinated debt issued to trusts is reduced by the amount of trust preferred securities purchased by the firm and will be fully phased out of Tier 2 capital by 2022 at a rate of 10% per year. See Note 16 for further information about the firm's junior subordinated debt issued to trusts and trust preferred securities purchased by the firm.
- Qualifying subordinated debt is subordinated debt issued by Group Inc. with an original maturity of five years or greater. The outstanding amount of subordinated debt qualifying for Tier 2 capital is reduced upon reaching a remaining maturity of five years. See Note 16 for further information about the firm's subordinated debt.

The tables below present changes in CET1, Tier 1 capital and Tier 2 capital.

	Three Months Ended March 2018	
$ in millions	**Standardized**	**Basel III Advanced**
Common Equity Tier 1		
Beginning balance	**$67,110**	**$67,110**
Change in common shareholders' equity	**1,986**	**1,986**
Change in deduction for:		
Transitional provisions	**(118)**	**(118)**
Goodwill and identifiable intangible assets, net of deferred tax liabilities	**(15)**	**(15)**
Change in other adjustments	**(323)**	**(323)**
Ending balance	**$68,640**	**$68,640**
Tier 1 capital		
Beginning balance	**$78,331**	**$78,331**
Change in deduction for:		
Transitional provisions	**(105)**	**(105)**
Investments in covered funds	**(17)**	**(17)**
Other net decrease in CET1	**1,648**	**1,648**
Change in preferred stock	**(650)**	**(650)**
Change in other adjustments	**4**	**4**
Ending balance	**79,211**	**79,211**
Tier 2 capital		
Beginning balance	**14,977**	**13,899**
Change in qualifying subordinated debt	**236**	**236**
Redesignation of junior subordinated debt issued to trusts	**(125)**	**(125)**
Change in the allowance for losses on loans and lending commitments	**(59)**	**–**
Change in other adjustments	**8**	**8**
Ending balance	**15,037**	**14,018**
Total capital	**$94,248**	**$93,229**

	Year Ended December 2017	
$ in millions	Standardized	Basel III Advanced
Common Equity Tier 1		
Beginning balance	$ 72,046	$ 72,046
Change in common shareholders' equity	(5,300)	(5,300)
Change in deduction for:		
Transitional provisions	(426)	(426)
Goodwill and identifiable intangible assets, net of deferred tax liabilities	(324)	(324)
Investments in nonconsolidated financial institutions	586	586
Change in other adjustments	528	528
Ending balance	$ 67,110	$ 67,110
Tier 1 capital		
Beginning balance	$ 82,440	$ 82,440
Change in deduction for:		
Transitional provisions	(274)	(274)
Investments in covered funds	(145)	(145)
Other net decrease in CET1	(4,510)	(4,510)
Change in preferred stock	650	650
Change in other adjustments	170	170
Ending balance	78,331	78,331
Tier 2 capital		
Beginning balance	16,074	15,352
Change in qualifying subordinated debt	(1,206)	(1,206)
Redesignation of junior subordinated debt issued to trusts	(225)	(225)
Change in the allowance for losses on loans and lending commitments	356	–
Change in other adjustments	(22)	(22)
Ending balance	14,977	13,899
Total capital	$ 93,308	$ 92,230

In the tables above, the change in the deduction for transitional provisions represents the increased phase-in of the deduction from 80% to 100% (effective January 1, 2018) for 2018 and from 60% to 80% (effective January 1, 2017) for 2017.

The tables below present the components of RWAs calculated in accordance with the Standardized Capital Rules and Basel III Advanced Rules.

	Standardized Capital Rules as of	
$ in millions	**March 2018**	December 2017
Credit RWAs		
Derivatives	**$128,348**	$126,076
Commitments, guarantees and loans	**150,118**	145,104
Securities financing transactions	**78,923**	77,962
Equity investments	**57,907**	48,155
Other	**67,283**	70,933
Total Credit RWAs	**482,579**	468,230
Market RWAs		
Regulatory VaR	**9,484**	7,532
Stressed VaR	**28,445**	32,753
Incremental risk	**8,321**	8,441
Comprehensive risk	**2,135**	2,397
Specific risk	**35,551**	36,258
Total Market RWAs	**83,936**	87,381
Total RWAs	**$566,515**	$555,611

	Basel III Advanced Rules as of	
$ in millions	**March 2018**	December 2017
Credit RWAs		
Derivatives	**$104,240**	$102,986
Commitments, guarantees and loans	**160,013**	163,375
Securities financing transactions	**19,867**	19,362
Equity investments	**60,583**	51,626
Other	**74,201**	75,968
Total Credit RWAs	**418,904**	413,317
Market RWAs		
Regulatory VaR	**9,484**	7,532
Stressed VaR	**28,445**	32,753
Incremental risk	**8,321**	8,441
Comprehensive risk	**2,049**	1,870
Specific risk	**35,551**	36,258
Total Market RWAs	**83,850**	86,854
Total Operational RWAs	**114,150**	117,475
Total RWAs	**$616,904**	$617,646

In the tables above:

- Securities financing transactions represent resale and repurchase agreements and securities borrowed and loaned transactions.
- Other includes receivables, certain debt securities, cash and cash equivalents and other assets.

The table below presents changes in RWAs calculated in accordance with the Standardized Capital Rules and Basel III Advanced Rules.

	Three Months Ended March 2018	
$ in millions	**Standardized**	**Basel III Advanced**
Risk-Weighted Assets		
Beginning balance	**$555,611**	**$617,646**
Credit RWAs		
Change in:		
Transitional provisions	**7,766**	**8,232**
Derivatives	**2,272**	**1,254**
Commitments, guarantees and loans	**5,014**	**(3,362)**
Securities financing transactions	**961**	**505**
Equity investments	**2,103**	**849**
Other	**(3,767)**	**(1,891)**
Change in Credit RWAs	**14,349**	**5,587**
Market RWAs		
Change in:		
Regulatory VaR	**1,952**	**1,952**
Stressed VaR	**(4,308)**	**(4,308)**
Incremental risk	**(120)**	**(120)**
Comprehensive risk	**(262)**	**179**
Specific risk	**(707)**	**(707)**
Change in Market RWAs	**(3,445)**	**(3,004)**
Operational RWAs		
Change in operational risk	**–**	**(3,325)**
Change in Operational RWAs	**–**	**(3,325)**
Ending balance	**$566,515**	**$616,904**

Standardized Credit RWAs as of March 2018 increased by $14.35 billion compared with December 2017, primarily due to transitional provisions reflecting the phase-in of a higher risk-weight for certain equity investments and an increase in commitments, guarantees and loans principally due to an increase in lending activity. Standardized Market RWAs as of March 2018 decreased by $3.45 billion compared with December 2017, primarily reflecting a decrease in stressed VaR as a result of changes in risk exposure.

Basel III Advanced Credit RWAs as of March 2018 increased by $5.59 billion compared with December 2017, primarily due to transitional provisions reflecting the phase-in of a higher risk-weight for certain equity investments. These increases were partially offset by a decrease in commitments, guarantees and loans principally due to changes in risk measurements. Basel III Advanced Market RWAs as of March 2018 decreased by $3.00 billion compared with December 2017, primarily reflecting a decrease in stressed VaR as a result of changes in risk exposure.

The table below presents changes in RWAs calculated in accordance with the Standardized Capital Rules and Basel III Advanced Rules.

	Year Ended December 2017	
$ in millions	Standardized	Basel III Advanced
Risk-Weighted Assets		
Beginning balance	$496,676	$549,650
Credit RWAs		
Change in:		
Transitional provisions	(233)	(233)
Derivatives	1,790	(2,110)
Commitments, guarantees and loans	29,360	40,583
Securities financing transactions	6,643	4,689
Equity investments	6,889	7,693
Other	12,368	12,608
Change in Credit RWAs	56,817	63,230
Market RWAs		
Change in:		
Regulatory VaR	(2,218)	(2,218)
Stressed VaR	10,278	10,278
Incremental risk	566	566
Comprehensive risk	(2,941)	(2,680)
Specific risk	(3,567)	(3,567)
Change in Market RWAs	2,118	2,379
Operational RWAs		
Change in operational risk	–	2,387
Change in Operational RWAs	–	2,387
Ending balance	$555,611	$617,646

In the table above, the increased deduction for transitional provisions represents the increased phase-in of the deduction from 60% to 80%, effective January 1, 2017.

Standardized Credit RWAs as of December 2017 increased by $56.82 billion compared with December 2016, primarily reflecting an increase in commitments, guarantees and loans, principally due to increased lending activity. Standardized Market RWAs as of December 2017 increased by $2.12 billion compared with December 2016, primarily reflecting an increase in stressed VaR as a result of increased risk exposures partially offset by decreases in specific risk, as a result of changes in risk exposures, and comprehensive risk, as a result of changes in risk measurements.

Basel III Advanced Credit RWAs as of December 2017 increased by $63.23 billion compared with December 2016, primarily reflecting an increase in commitments, guarantees and loans, principally due to increased lending activity. Basel III Advanced Market RWAs as of December 2017 increased by $2.38 billion compared with December 2016, primarily reflecting an increase in stressed VaR as a result of increased risk exposures partially offset by decreases in specific risk, as a result of changes in risk exposures, and comprehensive risk, as a result of changes in risk measurements.

Leverage Ratios. The table below presents the firm's Tier 1 leverage ratio and SLR.

	For the Three Months Ended or as of	
$ in millions	**March 2018**	December 2017
Tier 1 capital	**$ 79,211**	$ 78,331
Average total assets	**$ 967,026**	$ 937,424
Deductions from Tier 1 capital	**(4,664)**	(4,508)
Average adjusted total assets	**962,362**	932,916
Off-balance-sheet exposures	**428,094**	408,164
Total supplementary leverage exposure	**$1,390,456**	$1,341,080
Tier 1 leverage ratio	**8.2%**	8.4%
SLR	**5.7%**	5.8%

In the table above:

- Tier 1 capital and deductions from Tier 1 capital are calculated on a transitional basis as of December 2017.
- Average total assets represents the daily average assets for the quarter.
- Off-balance-sheet exposures represents the monthly average and consists of derivatives, securities financing transactions, commitments and guarantees.
- Tier 1 leverage ratio is defined as Tier 1 capital divided by average adjusted total assets.
- SLR is defined as Tier 1 capital divided by supplementary leverage exposure.

Bank Subsidiaries

Regulatory Capital Ratios. GS Bank USA, an FDIC-insured, New York State-chartered bank and a member of the Federal Reserve System, is supervised and regulated by the FRB, the FDIC, the New York State Department of Financial Services and the Consumer Financial Protection Bureau, and is subject to regulatory capital requirements that are calculated in substantially the same manner as those applicable to BHCs. For purposes of assessing the adequacy of its capital, GS Bank USA calculates its capital ratios in accordance with the regulatory capital requirements applicable to state member banks. Those requirements are based on the Capital Framework described above. GS Bank USA is an Advanced approach banking organization under the Capital Framework.

Under the regulatory framework for prompt corrective action applicable to GS Bank USA, in order to meet the quantitative requirements for being a "well-capitalized" depository institution, GS Bank USA must meet higher minimum requirements than the minimum ratios in the table below. In addition, under the FRB rules, commencing on January 1, 2018, in order to be considered a "well-capitalized" depository institution, GS Bank USA must meet the SLR requirement of 6.0% or greater.

As of both March 2018 and December 2017, GS Bank USA was in compliance with its minimum risk-based capital and leverage requirements and the "well-capitalized" minimum ratios.

The table below presents the minimum ratios and the "well-capitalized" minimum ratios required for GS Bank USA.

	Minimum Ratio as of		
	March 2018	December 2017	**"Well-capitalized" Minimum Ratio**
Risk-based capital ratios			
CET1 ratio	**6.375%**	5.750%	**6.5%**
Tier 1 capital ratio	**7.875%**	7.250%	**8.0%**
Total capital ratio	**9.875%**	9.250%	**10.0%**
Leverage ratios			
Tier 1 leverage ratio	**4.000%**	4.000%	**5.0%**
SLR	**3.000%**	N/A	**6.0%**

In the table above:

- The minimum risk-based capital ratios as of March 2018 reflect (i) the 75% phase-in of the capital conservation buffer of 2.5% and (ii) the countercyclical capital buffer of zero percent, each described above.
- The minimum risk-based capital ratios as of December 2017 reflect (i) the 50% phase-in of the capital conservation buffer of 2.5% and (ii) the countercyclical capital buffer of zero percent, each described above.

GS Bank USA's capital levels and prompt corrective action classification are also subject to qualitative judgments by the regulators about components of capital, risk weightings and other factors. Failure to comply with these capital requirements, including a breach of the buffers described above, could result in restrictions being imposed by GS Bank USA's regulators.

Similar to the firm, GS Bank USA is required to calculate each of the CET1, Tier 1 capital and Total capital ratios in accordance with both the Standardized Capital Rules and Basel III Advanced Rules. The lower of each risk-based capital ratio calculated in accordance with the Standardized Capital Rules and Basel III Advanced Rules is the ratio against which GS Bank USA's compliance with its minimum ratio requirements is assessed. Each of the risk-based capital ratios calculated in accordance with the Standardized Capital Rules was lower than that calculated in accordance with the Basel III Advanced Rules and therefore the Standardized Capital ratios were the ratios that applied to GS Bank USA as of both March 2018 and December 2017.

The table below presents the ratios for GS Bank USA calculated in accordance with both the Standardized Capital Rules and Basel III Advanced Rules.

	As of	
$ in millions	**March 2018**	December 2017
Standardized		
Common Equity Tier 1	**$ 25,895**	$ 25,343
Tier 1 capital	**25,895**	25,343
Tier 2 capital	**4,805**	2,547
Total capital	**$ 30,700**	$ 27,890
Basel III Advanced		
Common Equity Tier 1	**$ 25,895**	$ 25,343
Tier 1 capital	**25,895**	25,343
Standardized Tier 2 capital	**4,805**	2,547
Allowance for losses on loans and lending commitments	**(555)**	(547)
Tier 2 capital	**4,250**	2,000
Total capital	**$ 30,145**	$ 27,343
RWAs		
Standardized	**$237,915**	$229,775
Basel III Advanced	**$164,071**	$164,602
CET1 ratio		
Standardized	**10.9%**	11.0%
Basel III Advanced	**15.8%**	15.4%
Tier 1 capital ratio		
Standardized	**10.9%**	11.0%
Basel III Advanced	**15.8%**	15.4%
Total capital ratio		
Standardized	**12.9%**	12.1%
Basel III Advanced	**18.4%**	16.6%

GS Bank USA's Standardized and Basel III Advanced CET1 ratios and Tier 1 capital ratios remain essentially unchanged from December 2017 to March 2018. The increase in GS Bank USA's Standardized and Basel III Advanced Total capital ratios from December 2017 to March 2018 is primarily due to an increase in Total capital, principally due to the issuance of subordinated debt.

The table below presents GS Bank USA's Tier 1 leverage ratio and SLR.

	For the Three Months Ended or as of	
$ in millions	**March 2018**	December 2017
Tier 1 capital	**$ 25,895**	$ 25,343
Average total assets	**$177,520**	$168,854
Deductions from Tier 1 capital	**(96)**	(12)
Average adjusted total assets	**177,424**	168,842
Off-balance-sheet exposures	**187,729**	176,892
Total supplementary leverage exposure	**$365,153**	$345,734
Tier 1 leverage ratio	**14.6%**	15.0%
SLR	**7.1%**	7.3%

In the table above:

- Tier 1 capital and deductions from Tier 1 capital are calculated on a transitional basis as of December 2017.
- Average total assets represents the daily average assets for the quarter.
- Off-balance-sheet exposures represents the monthly average and consists of derivatives, securities financing transactions, commitments and guarantees.
- Tier 1 leverage ratio is defined as Tier 1 capital divided by average adjusted total assets.
- SLR is defined as Tier 1 capital divided by supplementary leverage exposure.

The firm's principal non-U.S. bank subsidiary, GSIB, is a wholly-owned credit institution, regulated by the Prudential Regulation Authority (PRA) and the Financial Conduct Authority and is subject to minimum capital requirements. As of both March 2018 and December 2017, GSIB was in compliance with all regulatory capital requirements.

Other. The deposits of GS Bank USA are insured by the FDIC to the extent provided by law. The FRB requires that GS Bank USA maintain cash reserves with the Federal Reserve Bank of New York. The amount deposited by GS Bank USA at the Federal Reserve Bank of New York was $48.45 billion and $50.86 billion as of March 2018 and December 2017, respectively, which exceeded required reserve amounts by $48.39 billion and $50.74 billion as of March 2018 and December 2017, respectively.

Restrictions on Payments

Group Inc.'s ability to withdraw capital from its regulated subsidiaries is limited by minimum equity capital requirements applicable to those subsidiaries, provisions of applicable law and regulations and other regulatory restrictions that limit the ability of those subsidiaries to declare and pay dividends without prior regulatory approval (e.g., the amount of dividends that may be paid by GS Bank USA is limited to the lesser of the amounts calculated under a recent earnings test and an undivided profits test) even if the relevant subsidiary would satisfy the equity capital requirements applicable to it after giving effect to the dividend. For example, the FRB, the FDIC and the New York State Department of Financial Services have authority to prohibit or to limit the payment of dividends by the banking organizations they supervise (including GS Bank USA) if, in the relevant regulator's opinion, payment of a dividend would constitute an unsafe or unsound practice in the light of the financial condition of the banking organization.

As of March 2018 and December 2017, Group Inc. was required to maintain $55.67 billion and $53.02 billion, respectively, of minimum equity capital in its regulated subsidiaries in order to satisfy the regulatory requirements of such subsidiaries.

Note 21.

Earnings Per Common Share

Basic earnings per common share (EPS) is calculated by dividing net earnings applicable to common shareholders by the weighted average number of common shares outstanding and RSUs for which no future service is required as a condition to the delivery of the underlying common stock (collectively, basic shares). Diluted EPS includes the determinants of basic EPS and, in addition, reflects the dilutive effect of the common stock deliverable for stock options and for RSUs for which future service is required as a condition to the delivery of the underlying common stock.

The table below presents the computations of basic and diluted EPS.

	Three Months Ended March	
in millions, except per share amounts	**2018**	2017
Net earnings applicable to common shareholders	**$2,737**	$2,162
Weighted average basic shares	**389.1**	412.5
Effect of dilutive securities:		
RSUs	**3.4**	4.7
Stock options	**1.3**	2.9
Dilutive securities	**4.7**	7.6
Weighted average basic shares and dilutive securities	**393.8**	420.1
Basic EPS	**$ 7.02**	$ 5.23
Diluted EPS	**$ 6.95**	$ 5.15

In the table above, unvested share-based awards that have non-forfeitable rights to dividends or dividend equivalents are treated as a separate class of securities in calculating EPS. The impact of applying this methodology was a reduction in basic EPS of $0.01 for both the three months ended March 2018 and March 2017.

The diluted EPS computations in the table above do not include antidilutive RSUs of less than 0.1 million for both the three months ended March 2018 and March 2017.

Note 22.

Transactions with Affiliated Funds

The firm has formed numerous nonconsolidated investment funds with third-party investors. As the firm generally acts as the investment manager for these funds, it is entitled to receive management fees and, in certain cases, advisory fees or incentive fees from these funds. Additionally, the firm invests alongside the third-party investors in certain funds.

The tables below present fees earned from affiliated funds, fees receivable from affiliated funds and the aggregate carrying value of the firm's interests in affiliated funds.

	Three Months Ended March	
$ in millions	**2018**	2017
Fees earned from funds	**$ 881**	$ 710

	As of	
$ in millions	**March 2018**	December 2017
Fees receivable from funds	**$ 601**	$ 637
Aggregate carrying value of interests in funds	**$4,403**	$4,993

The firm may periodically determine to waive certain management fees on selected money market funds. Management fees waived were $18 million and $25 million for the three months ended March 2018 and March 2017, respectively.

The Volcker Rule restricts the firm from providing financial support to covered funds (as defined in the rule) after the expiration of the conformance period. As a general matter, in the ordinary course of business, the firm does not expect to provide additional voluntary financial support to any covered funds but may choose to do so with respect to funds that are not subject to the Volcker Rule; however, in the event that such support is provided, the amount is not expected to be material.

The firm had an outstanding guarantee, as permitted under the Volcker Rule, on behalf of its funds of $154 million as of both March 2018 and December 2017. The firm has voluntarily provided this guarantee in connection with a financing agreement with a third-party lender executed by one of the firm's real estate funds that is not covered by the Volcker Rule. As of both March 2018 and December 2017, except as noted above, the firm has not provided any additional financial support to its affiliated funds.

In addition, in the ordinary course of business, the firm may also engage in other activities with its affiliated funds including, among others, securities lending, trade execution, market making, custody, and acquisition and bridge financing. See Note 18 for the firm's investment commitments related to these funds.

Note 23.

Interest Income and Interest Expense

Interest is recorded over the life of the instrument on an accrual basis based on contractual interest rates. The table below presents the firm's sources of interest income and interest expense.

	Three Months Ended March	
$ in millions	**2018**	2017
Interest income		
Deposits with banks	**$ 310**	$ 162
Collateralized agreements	**625**	281
Financial instruments owned	**1,666**	1,351
Loans receivable	**892**	565
Other interest	**737**	387
Total interest income	**4,230**	2,746
Interest expense		
Deposits	**501**	274
Collateralized financings	**384**	136
Financial instruments sold, but not yet purchased	**389**	336
Secured and unsecured borrowings:		
Short-term	**206**	121
Long-term	**1,305**	1,176
Other interest	**527**	187
Total interest expense	**3,312**	2,230
Net interest income	**$ 918**	$ 516

In the table above:

- Collateralized agreements includes rebates paid and interest income on securities borrowed.
- Other interest income includes interest income on customer debit balances and other interest-earning assets.
- Collateralized financings consists of securities sold under agreements to repurchase and securities loaned.
- Other interest expense includes rebates received on other interest-bearing liabilities and interest expense on customer credit balances.

Note 24.

Income Taxes

Tax Legislation

The provision for taxes in 2017 reflected an increase in income tax expense of $4.40 billion representing the estimated impact of Tax Legislation enacted on December 22, 2017. The $4.40 billion income tax expense included the repatriation tax on undistributed earnings of foreign subsidiaries, the effects of the implementation of a territorial tax system and the remeasurement of U.S. deferred tax assets at lower enacted tax rates. While the estimated impact of Tax Legislation was calculated to account for all available information, the firm anticipates modification to this amount may occur as a result of (i) refinement of the firm's calculations based on updated information, (ii) changes in the firm's interpretations and assumptions, (iii) updates from issuance of future legislative guidance and (iv) actions the firm may take as a result of Tax Legislation. During the three months ended March 2018, the firm did not make any material adjustments to this estimate.

Provision for Income Taxes

Income taxes are provided for using the asset and liability method under which deferred tax assets and liabilities are recognized for temporary differences between the financial reporting and tax bases of assets and liabilities. The firm reports interest expense related to income tax matters in provision for taxes and income tax penalties in other expenses.

Deferred Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities. These temporary differences result in taxable or deductible amounts in future years and are measured using the tax rates and laws that will be in effect when such differences are expected to reverse. Valuation allowances are established to reduce deferred tax assets to the amount that more likely than not will be realized and primarily relate to the ability to utilize losses in various tax jurisdictions. Tax assets and liabilities are presented as a component of other assets and other liabilities and accrued expenses, respectively.

Unrecognized Tax Benefits

The firm recognizes tax positions in the condensed consolidated financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. A position that meets this standard is measured at the largest amount of benefit that will more likely than not be realized on settlement. A liability is established for differences between positions taken in a tax return and amounts recognized in the condensed consolidated financial statements.

Regulatory Tax Examinations

The firm is subject to examination by the U.S. Internal Revenue Service (IRS) and other taxing authorities in jurisdictions where the firm has significant business operations, such as the United Kingdom, Japan, Hong Kong and various states, such as New York. The tax years under examination vary by jurisdiction. The firm does not expect completion of these audits to have a material impact on the firm's financial condition but it may be material to operating results for a particular period, depending, in part, on the operating results for that period.

The table below presents the earliest tax years that remain subject to examination by major jurisdiction.

Jurisdiction	As of March 2018
U.S. Federal	**2011**
New York State and City	**2011**
United Kingdom	**2014**
Japan	**2014**
Hong Kong	**2011**

U.S. Federal examinations of 2011 and 2012 began in 2013. The firm has been accepted into the Compliance Assurance Process program by the IRS for each of the tax years from 2013 through 2018. This program allows the firm to work with the IRS to identify and resolve potential U.S. federal tax issues before the filing of tax returns. The 2013 through 2016 tax years remain subject to post-filing review.

New York State and City examinations (excluding GS Bank USA) of 2011 through 2014 began in the fourth quarter of 2017. New York State and City examinations for GS Bank USA have been completed through 2014.

All years including and subsequent to the years in the table above remain open to examination by the taxing authorities. The firm believes that the liability for unrecognized tax benefits it has established is adequate in relation to the potential for additional assessments.

Note 25.

Business Segments

The firm reports its activities in the following four business segments: Investment Banking, Institutional Client Services, Investing & Lending and Investment Management.

Basis of Presentation

In reporting segments, certain of the firm's business lines have been aggregated where they have similar economic characteristics and are similar in each of the following areas: (i) the nature of the services they provide, (ii) their methods of distribution, (iii) the types of clients they serve and (iv) the regulatory environments in which they operate.

The cost drivers of the firm taken as a whole, compensation, headcount and levels of business activity, are broadly similar in each of the firm's business segments. Compensation and benefits expenses in the firm's segments reflect, among other factors, the overall performance of the firm, as well as the performance of individual businesses. Consequently, pre-tax margins in one segment of the firm's business may be significantly affected by the performance of the firm's other business segments.

The firm allocates assets (including allocations of global core liquid assets and cash, secured client financing and other assets), revenues and expenses among the four business segments. Due to the integrated nature of these segments, estimates and judgments are made in allocating certain assets, revenues and expenses. The allocation process is based on the manner in which management currently views the performance of the segments. Transactions between segments are based on specific criteria or approximate third-party rates.

The table below presents the firm's net revenues, pre-tax earnings and total assets by segment. Management believes that this information provides a reasonable representation of each segment's contribution to consolidated pre-tax earnings and total assets.

	Three Months Ended or as of March	
$ in millions	**2018**	2017
Investment Banking		
Financial Advisory	**$ 586**	$ 756
Equity underwriting	**410**	311
Debt underwriting	**797**	636
Total Underwriting	**1,207**	947
Total net revenues	**1,793**	1,703
Operating expenses	**1,010**	975
Pre-tax earnings	**$ 783**	$ 728
Segment assets	**$ 2,220**	$ 2,614
Institutional Client Services		
FICC Client Execution	**$ 2,074**	$ 1,685
Equities client execution	**1,062**	552
Commissions and fees	**817**	738
Securities services	**432**	384
Total Equities	**2,311**	1,674
Total net revenues	**4,385**	3,359
Operating expenses	**3,152**	2,544
Pre-tax earnings	**$ 1,233**	$ 815
Segment assets	**$707,395**	$667,778
Investing & Lending		
Equity securities	**$ 1,069**	$ 798
Debt securities and loans	**1,018**	666
Total net revenues	**2,087**	1,464
Operating expenses	**1,030**	750
Pre-tax earnings	**$ 1,057**	$ 714
Segment assets	**$251,116**	$209,958
Investment Management		
Management and other fees	**$ 1,346**	$ 1,219
Incentive fees	**213**	121
Transaction revenues	**212**	160
Total net revenues	**1,771**	1,500
Operating expenses	**1,425**	1,218
Pre-tax earnings	**$ 346**	$ 282
Segment assets	**$ 12,804**	$ 13,719
Total net revenues	**$ 10,036**	$ 8,026
Total operating expenses	**6,617**	5,487
Total pre-tax earnings	**$ 3,419**	$ 2,539
Total assets	**$973,535**	$894,069

In the table above:

- Revenues and expenses directly associated with each segment are included in determining pre-tax earnings.
- Net revenues in the firm's segments include allocations of interest income and interest expense to specific securities, commodities and other positions in relation to the cash generated by, or funding requirements of, such underlying positions. Net interest is included in segment net revenues as it is consistent with the way in which management assesses segment performance.
- Overhead expenses not directly allocable to specific segments are allocated ratably based on direct segment expenses.

The table below presents the amounts of net interest income by segment included in net revenues.

	Three Months Ended March	
$ in millions	**2018**	2017
Investment Banking	**$ –**	$ –
Institutional Client Services	**364**	203
Investing & Lending	**467**	243
Investment Management	**87**	70
Total net interest income	**$918**	$516

The table below presents the amounts of depreciation and amortization expense by segment included in pre-tax earnings.

	Three Months Ended March	
$ in millions	**2018**	2017
Investment Banking	**$ 25**	$ 33
Institutional Client Services	**138**	122
Investing & Lending	**82**	57
Investment Management	**54**	45
Total depreciation and amortization	**$299**	$257

Geographic Information

Due to the highly integrated nature of international financial markets, the firm manages its businesses based on the profitability of the enterprise as a whole. The methodology for allocating profitability to geographic regions is dependent on estimates and management judgment because a significant portion of the firm's activities require cross-border coordination in order to facilitate the needs of the firm's clients.

Geographic results are generally allocated as follows:

- Investment Banking: location of the client and investment banking team.
- Institutional Client Services: FICC Client Execution and Equities (excluding Securities services): location of the market-making desk; Securities services: location of the primary market for the underlying security.
- Investing & Lending: Investing: location of the investment; Lending: location of the client.
- Investment Management: location of the sales team.

The table below presents the total net revenues and pre-tax earnings of the firm by geographic region allocated based on the methodology referred to above, as well as the percentage of total net revenues and pre-tax earnings for each geographic region.

	Three Months Ended March			
$ in millions	**2018**		2017	
Net revenues				
Americas	**$ 5,885**	**59%**	$4,892	61%
Europe, Middle East and Africa	**2,605**	**26%**	1,919	24%
Asia	**1,546**	**15%**	1,215	15%
Total net revenues	**$10,036**	**100%**	$8,026	100%
Pre-tax earnings				
Americas	**$ 1,964**	**57%**	$1,524	61%
Europe, Middle East and Africa	**922**	**27%**	622	24%
Asia	**533**	**16%**	393	15%
Total pre-tax earnings	**$ 3,419**	**100%**	$2,539	100%

In the table above:

- Substantially all of the amounts in Americas were attributable to the U.S.
- Asia includes Australia and New Zealand.

Note 26.

Credit Concentrations

The firm's concentrations of credit risk arise from its market making, client facilitation, investing, underwriting, lending and collateralized transactions, and cash management activities, and may be impacted by changes in economic, industry or political factors. These activities expose the firm to many different industries and counterparties, and may also subject the firm to a concentration of credit risk to a particular central bank, counterparty, borrower or issuer, including sovereign issuers, or to a particular clearing house or exchange. The firm seeks to mitigate credit risk by actively monitoring exposures and obtaining collateral from counterparties as deemed appropriate.

The firm measures and monitors its credit exposure based on amounts owed to the firm after taking into account risk mitigants that management considers when determining credit risk. Such risk mitigants include netting and collateral arrangements and economic hedges, such as credit derivatives, futures and forward contracts. Netting and collateral agreements permit the firm to offset receivables and payables with such counterparties and/or enable the firm to obtain collateral on an upfront or contingent basis.

The table below presents the credit concentrations in cash instruments held by the firm and included in financial instruments owned.

	As of	
$ in millions	**March 2018**	December 2017
U.S. government and agency obligations	**$74,806**	$76,418
% of total assets	**7.7%**	8.3%
Non-U.S. government and agency obligations	**$42,053**	$33,956
% of total assets	**4.3%**	3.7%

In addition, as of March 2018 and December 2017, the firm had $80.17 billion and $76.13 billion, respectively, of cash deposits held at central banks (included in cash and cash equivalents), of which $48.45 billion and $50.86 billion, respectively, was held at the Federal Reserve Bank of New York.

As of both March 2018 and December 2017, the firm did not have credit exposure to any other counterparty that exceeded 2% of total assets.

Collateral obtained by the firm related to derivative assets is principally cash and is held by the firm or a third-party custodian. Collateral obtained by the firm related to resale agreements and securities borrowed transactions is primarily U.S. government and agency obligations and non-U.S. government and agency obligations. See Note 10 for further information about collateralized agreements and financings.

The table below presents U.S. government and agency obligations and non-U.S. government and agency obligations that collateralize resale agreements and securities borrowed transactions.

	As of	
$ in millions	**March 2018**	December 2017
U.S. government and agency obligations	**$ 89,370**	$96,905
Non-U.S. government and agency obligations	**$101,749**	$92,850

In the table above:

- Non-U.S. government and agency obligations primarily consist of securities issued by the governments of Japan, France, the U.K. and Germany.
- Given that the firm's primary credit exposure on such transactions is to the counterparty to the transaction, the firm would be exposed to the collateral issuer only in the event of counterparty default.

Note 27.

Legal Proceedings

The firm is involved in a number of judicial, regulatory and arbitration proceedings (including those described below) concerning matters arising in connection with the conduct of the firm's businesses. Many of these proceedings are in early stages, and many of these cases seek an indeterminate amount of damages.

Under ASC 450, an event is "reasonably possible" if "the chance of the future event or events occurring is more than remote but less than likely" and an event is "remote" if "the chance of the future event or events occurring is slight." Thus, references to the upper end of the range of reasonably possible loss for cases in which the firm is able to estimate a range of reasonably possible loss mean the upper end of the range of loss for cases for which the firm believes the risk of loss is more than slight.

With respect to matters described below for which management has been able to estimate a range of reasonably possible loss where (i) actual or potential plaintiffs have claimed an amount of money damages, (ii) the firm is being, or threatened to be, sued by purchasers in a securities offering and is not being indemnified by a party that the firm believes will pay the full amount of any judgment, or (iii) the purchasers are demanding that the firm repurchase securities, management has estimated the upper end of the range of reasonably possible loss as being equal to (a) in the case of (i), the amount of money damages claimed, (b) in the case of (ii), the difference between the initial sales price of the securities that the firm sold in such offering and the estimated lowest subsequent price of such securities prior to the action being commenced and (c) in the case of (iii), the price that purchasers paid for the securities less the estimated value, if any, as of March 2018 of the relevant securities, in each of cases (i), (ii) and (iii), taking into account any other factors believed to be relevant to the particular matter or matters of that type. As of the date hereof, the firm has estimated the upper end of the range of reasonably possible aggregate loss for such matters and for any other matters described below where management has been able to estimate a range of reasonably possible aggregate loss to be approximately $1.5 billion in excess of the aggregate reserves for such matters.

Management is generally unable to estimate a range of reasonably possible loss for matters other than those included in the estimate above, including where (i) actual or potential plaintiffs have not claimed an amount of money damages, except in those instances where management can otherwise determine an appropriate amount, (ii) matters are in early stages, (iii) matters relate to regulatory investigations or reviews, except in those instances where management can otherwise determine an appropriate amount, (iv) there is uncertainty as to the likelihood of a class being certified or the ultimate size of the class, (v) there is uncertainty as to the outcome of pending appeals or motions, (vi) there are significant factual issues to be resolved, and/or (vii) there are novel legal issues presented. For example, the firm's potential liabilities with respect to future mortgage-related "put-back" claims described below may ultimately result in an increase in the firm's liabilities, but are not included in management's estimate of reasonably possible loss. As another example, the firm's potential liabilities with respect to the investigations and reviews described below in "Regulatory Investigations and Reviews and Related Litigation" also generally are not included in management's estimate of reasonably possible loss. However, management does not believe, based on currently available information, that the outcomes of such other matters will have a material adverse effect on the firm's financial condition, though the outcomes could be material to the firm's operating results for any particular period, depending, in part, upon the operating results for such period. See Note 18 for further information about mortgage-related contingencies.

Mortgage-Related Matters

Beginning in April 2010, a number of purported securities law class actions were filed in the U.S. District Court for the Southern District of New York challenging the adequacy of Group Inc.'s public disclosure of, among other things, the firm's activities in the CDO market, and the firm's conflict of interest management.

The consolidated amended complaint filed on July 25, 2011, which names as defendants Group Inc. and certain current and former officers and employees of Group Inc. and its affiliates, generally alleges violations of Sections 10(b) and 20(a) of the Exchange Act and seeks unspecified damages. On January 12, 2018, the U.S. Court of Appeals for the Second Circuit vacated the district court's class certification order and remanded for reconsideration.

In June 2012, the Board received a demand from a shareholder that the Board investigate and take action relating to the firm's mortgage-related activities and to stock sales by certain directors and executives of the firm. On February 15, 2013, this shareholder filed a putative shareholder derivative action in New York Supreme Court, New York County, against Group Inc. and certain current or former directors and employees, based on these activities and stock sales. The derivative complaint includes allegations of breach of fiduciary duty, unjust enrichment, abuse of control, gross mismanagement and corporate waste, and seeks, among other things, unspecified monetary damages, disgorgement of profits and certain corporate governance and disclosure reforms. On May 28, 2013, Group Inc. informed the shareholder that the Board completed its investigation and determined to refuse the demand. On June 20, 2013, the shareholder made a books and records demand requesting materials relating to the Board's determination. The parties have agreed to stay proceedings in the putative derivative action pending resolution of the books and records demand.

In addition, the Board has received books and records demands from several shareholders for materials relating to, among other subjects, the firm's mortgage servicing and foreclosure activities, participation in federal programs providing assistance to financial institutions and homeowners, loan sales to Fannie Mae and Freddie Mac, mortgage-related activities and conflicts management.

The firm has entered into agreements with U.S. Bank National Association to toll the relevant statute of limitations with respect to claims for repurchase of residential mortgage loans based on alleged breaches of representations related to $1.7 billion original notional face amount of securitizations issued by trusts for which U.S. Bank National Association acts as trustee.

The firm has received subpoenas or requests for information from, and is engaged in discussions with, certain regulators and law enforcement agencies with which it has not entered into settlement agreements as part of inquiries or investigations relating to mortgage-related matters.

Director Compensation-Related Litigation

On May 9, 2017, Group Inc. and certain of its current and former directors were named as defendants in a purported direct and derivative shareholder action in the Court of Chancery of the State of Delaware (a similar purported derivative action, filed in June 2015, alleging excessive director compensation over the period 2012 to 2014 was voluntarily dismissed without prejudice in December 2016). The new complaint alleges that excessive compensation has been paid to the non-employee director defendants since 2015, and that certain disclosures in connection with soliciting stockholder approval of the stock incentive plans were deficient. The complaint asserts claims for breaches of fiduciary duties and seeks, among other things, rescission or in some cases rescissory damages, disgorgement, and shareholder votes on several matters. Defendants moved to dismiss on July 28, 2017. On March 20, 2018, a definitive settlement was reached, subject to court approval, pursuant to which, among other things, Group Inc. included certain disclosures in its 2018 proxy statement.

Currencies-Related Litigation

GS&Co. and Group Inc. are among the defendants named in putative class actions filed in the U.S. District Court for the Southern District of New York beginning in September 2016 on behalf of putative indirect purchasers of foreign exchange instruments. The consolidated amended complaint, filed on June 30, 2017, generally alleges a conspiracy to manipulate the foreign currency exchange markets and asserts claims under federal and state antitrust laws and state consumer protection laws and seeks injunctive relief, as well as treble damages in an unspecified amount. On March 15, 2018, the Court granted defendants' motion to dismiss, and the plaintiffs moved for leave to replead on April 5, 2018.

Financial Advisory Services

Group Inc. and certain of its affiliates are from time to time parties to various civil litigation and arbitration proceedings and other disputes with clients and third parties relating to the firm's financial advisory activities. These claims generally seek, among other things, compensatory damages and, in some cases, punitive damages, and in certain cases allege that the firm did not appropriately disclose or deal with conflicts of interest.

Underwriting Litigation

Firm affiliates are among the defendants in a number of proceedings in connection with securities offerings. In these proceedings, including those described below, the plaintiffs assert class action or individual claims under federal and state securities laws and in some cases other applicable laws, allege that the offering documents for the securities that they purchased contained material misstatements and omissions, and generally seek compensatory and rescissory damages in unspecified amounts. Certain of these proceedings involve additional allegations.

Cobalt International Energy. Cobalt International Energy, Inc. (Cobalt), certain of its officers and directors (including employees of affiliates of Group Inc. who served as directors of Cobalt), affiliates of shareholders of Cobalt (including Group Inc.) and the underwriters (including GS&Co.) for certain offerings of Cobalt's securities are defendants in a putative securities class action filed on November 30, 2014 in the U.S. District Court for the Southern District of Texas. The second consolidated amended complaint, filed on March 15, 2017, relates to a \$1.67 billion February 2012 offering of Cobalt common stock, a \$1.38 billion December 2012 offering of Cobalt's convertible notes, a \$1.00 billion January 2013 offering of Cobalt's common stock, a \$1.33 billion May 2013 offering of Cobalt's common stock, and a \$1.30 billion May 2014 offering of Cobalt's convertible notes.

The consolidated amended complaint alleges that, among others, Group Inc. and GS&Co. are liable as controlling persons with respect to all five offerings, and that the shareholder affiliates (including Group Inc.) are liable for the sale of Cobalt common stock on the basis of inside information. The consolidated amended complaint also seeks damages from GS&Co. in connection with its acting as an underwriter of 16,594,500 shares of common stock representing an aggregate offering price of approximately \$465 million, \$690 million principal amount of convertible notes, and approximately \$508 million principal amount of convertible notes in the February 2012, December 2012 and May 2014 offerings, respectively, for an aggregate offering price of approximately \$1.66 billion.

On January 19, 2016, the court granted, with leave to replead, the underwriter defendants' motions to dismiss as to claims by plaintiffs who purchased Cobalt securities after April 30, 2013, but denied the motions to dismiss in all other respects. On June 15, 2017, the court granted the plaintiffs' motion for class certification and denied certain of the shareholder affiliates' motions (including Group Inc.) to dismiss the claim alleging sales based on inside information. On August 4, 2017, the U.S. Court of Appeals for the Fifth Circuit granted defendants' petition for interlocutory review of the class certification order. On August 23, 2017, the district court denied the defendants' motion for reconsideration of certain aspects of the class certification order. The district court and the Fifth Circuit denied defendants' request to stay discovery pending resolution of the Fifth Circuit proceeding. On December 14, 2017, Cobalt filed for Chapter 11 bankruptcy.

Cobalt, certain of its officers and directors (including employees of affiliates of Group Inc. who served as directors of Cobalt), certain shareholders of Cobalt (including funds affiliated with Group Inc.), and affiliates of these shareholders (including Group Inc.) are defendants in putative shareholder derivative actions filed on May 6, 2016 and November 29, 2016 in Texas District Court, Harris County. As to the director and officer defendants (including employees of affiliates of Group Inc. who served as directors of Cobalt), the petitions generally allege that they breached their fiduciary duties under state law by making materially false and misleading statements concerning Cobalt. As to the shareholder defendants and their affiliates (including Group Inc. and several affiliated funds), the original petition also alleges that they breached their fiduciary duties by selling Cobalt securities in the common stock offerings described above on the basis of inside information. The petitions seek, among other things, unspecified monetary damages and disgorgement of proceeds from the sale of Cobalt common stock. Cobalt's chapter 11 plan, which became effective on April 10, 2018, releases the derivative claims against Group Inc. and its affiliated funds.

Adeptus Health. GS&Co. is among the underwriters named as defendants in several putative securities class actions, filed beginning in October 2016 and consolidated in the U.S. District Court for the Eastern District of Texas. In addition to the underwriters, the defendants include certain former directors and officers of Adeptus Health Inc. (Adeptus) and its principal private equity investor. As to the underwriters, the consolidated amended complaint, filed on November 21, 2017, relates to the $124 million June 2014 initial public offering, the $154 million May 2015 secondary equity offering, the $411 million July 2015 secondary equity offering, and the $175 million June 2016 secondary equity offering. GS&Co. underwrote 1.69 million shares of common stock in the June 2014 initial public offering representing an aggregate offering price of approximately $37 million, 962,378 shares of common stock in the May 2015 offering representing an aggregate offering price of approximately $61 million, 1.76 million shares of common stock in the July 2015 offering representing an aggregate offering price of approximately $184 million, and all the shares of common stock in the June 2016 offering representing an aggregate offering price of approximately $175 million. On April 19, 2017, Adeptus filed for Chapter 11 bankruptcy. The defendants filed motions to dismiss on February 5, 2018.

SunEdison. GS&Co. is among the underwriters named as defendants in several putative class actions and individual actions filed beginning in March 2016 relating to the August 2015 public offering of $650 million of SunEdison, Inc. (SunEdison) convertible preferred stock. On April 21, 2016, SunEdison filed for Chapter 11 bankruptcy. The pending cases were transferred to the U.S. District Court for the Southern District of New York and on March 17, 2017, certain plaintiffs filed an amended complaint. The defendants also include certain of SunEdison's directors and officers. GS&Co., as underwriter, sold 138,890 shares of SunEdison convertible preferred stock in the offering, representing an aggregate offering price of approximately $139 million. On March 6, 2018, the defendants' motion to dismiss in the class action was granted in part and denied in part.

Valeant Pharmaceuticals International. GS&Co. and Goldman Sachs Canada Inc. (GS Canada) are among the underwriters and initial purchasers named as defendants in a putative class action filed on March 2, 2016 in the Superior Court of Quebec, Canada. In addition to the underwriters and initial purchasers, the defendants include Valeant Pharmaceuticals International, Inc. (Valeant), certain directors and officers of Valeant and Valeant's auditor. As to GS&Co. and GS Canada, the complaint relates to the June 2013 public offering of $2.3 billion of common stock, the June 2013 Rule 144A offering of $3.2 billion principal amount of senior notes, and the November 2013 Rule 144A offering of $900 million principal amount of senior notes. The complaint asserts claims under the Quebec Securities Act and the Civil Code of Quebec. On August 29, 2017, the court certified a class that includes only non-U.S. purchasers in the offerings. Defendant's motion for leave to appeal the certification was denied on November 30, 2017.

GS&Co. and GS Canada, as sole underwriters, sold 5,334,897 shares of common stock in the June 2013 offering to non-U.S. purchasers representing an aggregate offering price of approximately $453 million and, as initial purchasers, had a proportional share of sales to non-U.S. purchasers of approximately CAD14.2 million in principal amount of senior notes in the June 2013 and November 2013 Rule 144A offerings.

Snap Inc. GS&Co. is among the underwriters named as defendants in putative securities class actions pending in California Superior Court, County of Los Angeles and the U.S. District Court for the Central District of California beginning in May 2017, relating to Snap Inc.'s $3.91 billion March 2017 initial public offering. In addition to the underwriters, the defendants include Snap Inc. and certain of its officers and directors. GS&Co. underwrote 57,040,000 shares of common stock representing an aggregate offering price of approximately $970 million. Defendants moved to dismiss the federal court action on December 1, 2017.

Investment Management Services

Group Inc. and certain of its affiliates are parties to various civil litigation and arbitration proceedings and other disputes with clients relating to losses allegedly sustained as a result of the firm's investment management services. These claims generally seek, among other things, restitution or other compensatory damages and, in some cases, punitive damages.

Interest Rate Swap Antitrust Litigation

Group Inc., GS&Co., Goldman Sachs International (GSI), GS Bank USA and Goldman Sachs Financial Markets, L.P. (GSFM) are among the defendants named in a putative antitrust class action relating to the trading of interest rate swaps, filed in November 2015 and consolidated in the U.S. District Court for the Southern District of New York. The same Goldman Sachs entities also are among the defendants named in an antitrust action relating to the trading of interest rate swaps filed in the U.S. District Court for the Southern District of New York in April 2016 by two operators of swap execution facilities and certain of their affiliates. These actions have been consolidated for pretrial proceedings. The second consolidated amended complaint in both actions, filed on December 9, 2016, generally asserts claims under federal antitrust law and state common law in connection with an alleged conspiracy among the defendants to preclude exchange trading of interest rate swaps. The complaint in the individual action also asserts claims under state antitrust law. The complaints seek declaratory and injunctive relief, as well as treble damages in an unspecified amount. Defendants moved to dismiss both actions on January 20, 2017. On July 28, 2017, the district court issued a decision dismissing the state common law claims asserted by the plaintiffs in the individual action and otherwise limiting the antitrust claims in both actions and the state common law claim in the putative class action to the period from 2013 to 2016.

Securities Lending Antitrust Litigation

Group Inc. and GS&Co. are among the defendants named in a putative antitrust class action and an individual action relating to securities lending practices filed in the U.S. District Court for the Southern District of New York beginning in August 2017. The complaints generally assert claims under federal antitrust law and state common law in connection with an alleged conspiracy among the defendants to preclude the development of electronic platforms for securities lending transactions. The individual complaint also asserts claims for tortious interference with business relations and under state trade practices law. The complaints seek declaratory and injunctive relief, as well as treble damages and restitution in unspecified amounts. Group Inc. was voluntarily dismissed from the putative class action on January 26, 2018. Defendants moved to dismiss the class action complaint on January 26, 2018.

Credit Default Swap Antitrust Litigation

Group Inc., GS&Co., GSI, GS Bank USA and GSFM are among the defendants named in an antitrust action relating to the trading of credit default swaps filed in the U.S. District Court for the Southern District of New York on June 8, 2017 by the operator of a swap execution facility and certain of its affiliates. The complaint generally asserts claims under federal and state antitrust laws and state common law in connection with an alleged conspiracy among the defendants to preclude trading of credit default swaps on the plaintiffs' swap execution facility. The complaint seeks declaratory and injunctive relief, as well as treble damages in an unspecified amount. Defendants moved to dismiss on September 11, 2017.

Commodities-Related Litigation

GSI is among the defendants named in putative class actions relating to trading in platinum and palladium, filed beginning on November 25, 2014 and most recently amended on May 15, 2017, in the U.S. District Court for the Southern District of New York. The amended complaint generally alleges that the defendants violated federal antitrust laws and the Commodity Exchange Act in connection with an alleged conspiracy to manipulate a benchmark for physical platinum and palladium prices and seek declaratory and injunctive relief, as well as treble damages in an unspecified amount. Defendants moved to dismiss the third consolidated amended complaint on July 21, 2017.

U.S. Treasury Securities Litigation

GS&Co. is among the primary dealers named as defendants in several putative class actions relating to the market for U.S. Treasury securities, filed beginning in July 2015 and consolidated in the U.S. District Court for the Southern District of New York. GS&Co. is also among the primary dealers named as defendants in a similar individual action filed in the U.S. District Court for the Southern District of New York on August 25, 2017. The consolidated class action complaint, filed on December 29, 2017, generally alleges that the defendants violated antitrust laws in connection with an alleged conspiracy to manipulate the when-issued market and auctions for U.S. Treasury securities and that certain defendants, including GS&Co., colluded to preclude trading of U.S. Treasury securities on electronic trading platforms in order to impede competition in the bidding process. The individual action alleges a similar conspiracy regarding manipulation of the when-issued market and auctions, as well as related futures and options in violation of the Commodity Exchange Act. The complaints seek declaratory and injunctive relief, treble damages in an unspecified amount and restitution. The defendants moved to dismiss on February 23, 2018.

Employment-Related Matters

On September 15, 2010, a putative class action was filed in the U.S. District Court for the Southern District of New York by three female former employees alleging that Group Inc. and GS&Co. have systematically discriminated against female employees in respect of compensation, promotion, assignments, mentoring and performance evaluations. The complaint alleges a class consisting of all female employees employed at specified levels in specified areas by Group Inc. and GS&Co. since July 2002, and asserts claims under federal and New York City discrimination laws. The complaint seeks class action status, injunctive relief and unspecified amounts of compensatory, punitive and other damages.

On July 17, 2012, the district court issued a decision granting in part Group Inc.'s and GS&Co.'s motion to strike certain of plaintiffs' class allegations on the ground that plaintiffs lacked standing to pursue certain equitable remedies and denying Group Inc.'s and GS&Co.'s motion to strike plaintiffs' class allegations in their entirety as premature. On March 21, 2013, the U.S. Court of Appeals for the Second Circuit held that arbitration should be compelled with one of the named plaintiffs, who as a managing director was a party to an arbitration agreement with the firm. On March 10, 2015, the magistrate judge to whom the district judge assigned the remaining plaintiffs' May 2014 motion for class certification recommended that the motion be denied in all respects. On August 3, 2015, the magistrate judge granted the plaintiffs' motion to intervene two female individuals, one of whom was employed by the firm as of September 2010 and the other of whom ceased to be an employee of the firm subsequent to the magistrate judge's decision. On March 30, 2018, the district court certified a damages class as to the plaintiffs' disparate impact and treatment claims. On April 13, 2018, defendants filed a petition with the Second Circuit Court of Appeals seeking interlocutory review of the district court's certification decision.

1Malaysia Development Berhad (1MDB)-Related Matters

The firm has received subpoenas and requests for documents and information from various governmental and regulatory bodies and self-regulatory organizations as part of investigations and reviews relating to financing transactions and other matters involving 1MDB, a sovereign wealth fund in Malaysia. The firm is cooperating with all such governmental and regulatory investigations and reviews.

Regulatory Investigations and Reviews and Related Litigation

Group Inc. and certain of its affiliates are subject to a number of other investigations and reviews by, and in some cases have received subpoenas and requests for documents and information from, various governmental and regulatory bodies and self-regulatory organizations and litigation and shareholder requests relating to various matters relating to the firm's businesses and operations, including:

- The 2008 financial crisis;
- The public offering process;
- The firm's investment management and financial advisory services;
- Conflicts of interest;
- Research practices, including research independence and interactions between research analysts and other firm personnel, including investment banking personnel, as well as third parties;
- Transactions involving government-related financings and other matters, municipal securities, including wall-cross procedures and conflict of interest disclosure with respect to state and municipal clients, the trading and structuring of municipal derivative instruments in connection with municipal offerings, political contribution rules, municipal advisory services and the possible impact of credit default swap transactions on municipal issuers;
- The offering, auction, sales, trading and clearance of corporate and government securities, currencies, commodities and other financial products and related sales and other communications and activities, as well as the firm's supervision and controls relating to such activities, including compliance with the SEC's short sale rule, algorithmic, high-frequency and quantitative trading, the firm's U.S. alternative trading system (dark pool), futures trading, options trading, when-issued trading, transaction reporting, technology systems and controls, securities lending practices, trading and clearance of credit derivative instruments and interest rate swaps, commodities activities and metals storage, private placement practices, allocations of and trading in securities, and trading activities and communications in connection with the establishment of benchmark rates, such as currency rates;
- Compliance with the U.S. Foreign Corrupt Practices Act;
- The firm's hiring and compensation practices;
- The firm's system of risk management and controls; and
- Insider trading, the potential misuse and dissemination of material nonpublic information regarding corporate and governmental developments and the effectiveness of the firm's insider trading controls and information barriers.

The firm is cooperating with all such governmental and regulatory investigations and reviews.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and the Shareholders of The Goldman Sachs Group, Inc.:

Results of Review of Financial Statements

We have reviewed the accompanying condensed consolidated statement of financial condition of The Goldman Sachs Group, Inc. and its subsidiaries (the Company) as of March 31, 2018, the related condensed consolidated statements of earnings for the three month periods ended March 31, 2018 and 2017, the condensed consolidated statements of comprehensive income for the three month periods ended March 31, 2018 and 2017, the condensed consolidated statement of changes in shareholders' equity for the three month period ended March 31, 2018, and the condensed consolidated statements of cash flows for the three month periods ended March 31, 2018 and 2017, including the related notes (collectively referred to as the "interim financial statements"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial condition of the Company as of December 31, 2017, and the related consolidated statements of earnings, comprehensive income, changes in shareholders' equity and cash flows for the year then ended (not presented herein), and in our report dated February 23, 2018, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated statement of financial condition as of December 31, 2017, and the condensed consolidated statement of changes in shareholders' equity for the year ended December 31, 2017, is fairly stated in all material respects in relation to the consolidated financial statements from which it has been derived.

Basis for Review Results

These interim financial statements are the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our review in accordance with the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ PRICEWATERHOUSECOOPERS LLP

New York, New York
May 3, 2018

Distribution of Assets, Liabilities and Shareholders' Equity

The tables below present a summary of average balances, interest and interest rates.

	Average Balance for the Three Months Ended March	
$ in millions	**2018**	2017
Assets		
U.S.	**$ 71,421**	$ 74,199
Non-U.S.	**50,353**	32,212
Total deposits with banks	**121,774**	106,411
U.S.	**148,792**	164,589
Non-U.S.	**150,713**	130,310
Total collateralized agreements	**299,505**	294,899
U.S.	**158,580**	152,460
Non-U.S.	**119,581**	104,832
Total financial instruments owned	**278,161**	257,292
U.S.	**62,581**	45,656
Non-U.S.	**6,152**	4,441
Total loans receivable	**68,733**	50,097
U.S.	**47,422**	34,459
Non-U.S.	**48,845**	38,796
Total other interest-earning assets	**96,267**	73,255
Total interest-earning assets	**864,440**	781,954
Cash and due from banks	**13,349**	11,464
Other non-interest-earning assets	**89,237**	81,167
Total assets	**$967,026**	$874,585
Liabilities		
U.S.	**$110,569**	$101,807
Non-U.S.	**29,107**	18,783
Total interest-bearing deposits	**139,676**	120,590
U.S.	**65,383**	50,890
Non-U.S.	**46,685**	35,837
Total collateralized financings	**112,068**	86,727
U.S.	**35,447**	34,493
Non-U.S.	**49,824**	38,029
Total financial instruments sold, but not yet purchased	**85,271**	72,522
U.S.	**43,358**	36,571
Non-U.S.	**16,097**	13,316
Total short-term borrowings	**59,455**	49,887
U.S.	**210,118**	188,916
Non-U.S.	**20,823**	12,097
Total long-term borrowings	**230,941**	201,013
U.S.	**122,673**	134,748
Non-U.S.	**66,126**	58,594
Total other interest-bearing liabilities	**188,799**	193,342
Total interest-bearing liabilities	**816,210**	724,081
Non-interest-bearing deposits	**3,980**	3,413
Other non-interest-bearing liabilities	**64,352**	60,278
Total liabilities	**884,542**	787,772
Shareholders' equity		
Preferred stock	**11,366**	11,203
Common stock	**71,118**	75,610
Total shareholders' equity	**82,484**	86,813
Total liabilities and shareholders' equity	**$967,026**	$874,585
Percentage of interest-earning assets and interest-bearing liabilities attributable to non-U.S. operations		
Assets	**43.46%**	39.72%
Liabilities	**28.02%**	24.40%

	Interest for the Three Months Ended March	
$ in millions	**2018**	2017
Assets		
U.S.	**$ 283**	$ 149
Non-U.S.	**27**	13
Total deposits with banks	**310**	162
U.S.	**513**	233
Non-U.S.	**112**	48
Total collateralized agreements	**625**	281
U.S.	**1,035**	930
Non-U.S.	**631**	421
Total financial instruments owned	**1,666**	1,351
U.S.	**796**	500
Non-U.S.	**96**	65
Total loans receivable	**892**	565
U.S.	**520**	290
Non-U.S.	**217**	97
Total other interest-earning assets	**737**	387
Total interest-earning assets	**$4,230**	$2,746
Liabilities		
U.S.	**$ 444**	$ 241
Non-U.S.	**57**	33
Total interest-bearing deposits	**501**	274
U.S.	**336**	114
Non-U.S.	**48**	22
Total collateralized financings	**384**	136
U.S.	**197**	168
Non-U.S.	**192**	168
Total financial instruments sold, but not yet purchased	**389**	336
U.S.	**202**	113
Non-U.S.	**4**	8
Total short-term borrowings	**206**	121
U.S.	**1,284**	1,161
Non-U.S.	**21**	15
Total long-term borrowings	**1,305**	1,176
U.S.	**603**	37
Non-U.S.	**(76)**	150
Total other interest-bearing liabilities	**527**	187
Total interest-bearing liabilities	**$3,312**	$2,230
Net interest income		
U.S.	**$ 81**	$ 268
Non-U.S.	**837**	248
Net interest income	**$ 918**	$ 516

Statistical Disclosures

	Annualized Average Rate for the Three Months Ended March	
	2018	2017
Assets		
U.S.	**1.61%**	0.81%
Non-U.S.	**0.22%**	0.16%
Total deposits with banks	**1.03%**	0.62%
U.S.	**1.40%**	0.57%
Non-U.S.	**0.30%**	0.15%
Total collateralized agreements	**0.85%**	0.39%
U.S.	**2.65%**	2.47%
Non-U.S.	**2.14%**	1.63%
Total financial instruments owned	**2.43%**	2.13%
U.S.	**5.16%**	4.44%
Non-U.S.	**6.33%**	5.94%
Total loans receivable	**5.26%**	4.57%
U.S.	**4.45%**	3.41%
Non-U.S.	**1.80%**	1.01%
Total other interest-earning assets	**3.10%**	2.14%
Total interest-earning assets	**1.98%**	1.42%
Liabilities		
U.S.	**1.63%**	0.96%
Non-U.S.	**0.79%**	0.71%
Total interest-bearing deposits	**1.45%**	0.92%
U.S.	**2.08%**	0.91%
Non-U.S.	**0.42%**	0.25%
Total collateralized financings	**1.39%**	0.64%
U.S.	**2.25%**	1.98%
Non-U.S.	**1.56%**	1.79%
Total financial instruments sold, but not yet purchased	**1.85%**	1.88%
U.S.	**1.89%**	1.25%
Non-U.S.	**0.10%**	0.24%
Total short-term borrowings	**1.41%**	0.98%
U.S.	**2.48%**	2.49%
Non-U.S.	**0.41%**	0.50%
Total long-term borrowings	**2.29%**	2.37%
U.S.	**1.99%**	0.11%
Non-U.S.	**(0.47)%**	1.04%
Total other interest-bearing liabilities	**1.13%**	0.39%
Total interest-bearing liabilities	**1.65%**	1.25%
Interest rate spread	**0.33%**	0.17%
U.S.	**0.07%**	0.23%
Non-U.S.	**0.90%**	0.32%
Net yield on interest-earning assets	**0.43%**	0.27%

In the tables above:

- Assets, liabilities and interest are classified as U.S. and non-U.S. based on the location of the legal entity in which the assets and liabilities are held. See the notes to the condensed consolidated financial statements for further information about such assets and liabilities.
- Derivative instruments and commodities are included in other non-interest-earning assets and other non-interest-bearing liabilities.
- Total other interest-earning assets primarily consists of certain receivables from customers and counterparties.
- Collateralized financings consists of securities sold under agreements to repurchase and securities loaned.
- Substantially all of the total other interest-bearing liabilities consists of certain payables to customers and counterparties.
- Interest rates for borrowings include the effects of interest rate swaps accounted for as hedges.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Introduction

The Goldman Sachs Group, Inc. (Group Inc. or parent company), a Delaware corporation, together with its consolidated subsidiaries, is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. Founded in 1869, we are headquartered in New York and maintain offices in all major financial centers around the world.

When we use the terms "the firm," "we," "us" and "our," we mean Group Inc. and its consolidated subsidiaries. We report our activities in four business segments: Investment Banking, Institutional Client Services, Investing & Lending and Investment Management. See "Results of Operations" below for further information about our business segments.

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2017. References to "the 2017 Form 10-K" are to our Annual Report on Form 10-K for the year ended December 31, 2017. References to "this Form 10-Q" are to our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2018. All references to "the condensed consolidated financial statements" or "Statistical Disclosures" are to Part I, Item 1 of this Form 10-Q. All references to March 2018 and March 2017 refer to our periods ended, or the dates, as the context requires, March 31, 2018 and March 31, 2017, respectively. All references to December 2017 refer to the date December 31, 2017. Any reference to a future year refers to a year ending on December 31 of that year. Certain reclassifications have been made to previously reported amounts to conform to the current presentation.

Executive Overview

We generated net earnings of $2.83 billion and diluted earnings per common share of $6.95 for the first quarter of 2018, an increase of 26% and 35%, respectively, compared with $2.26 billion and $5.15 per share for the first quarter of 2017. Annualized return on average common shareholders' equity (ROE) was 15.4% for the first quarter of 2018, compared with 11.4% for the first quarter of 2017. Book value per common share was $186.73 as of March 2018, 3.2% higher compared with December 2017.

Net revenues were $10.04 billion for the first quarter of 2018, 25% higher than the first quarter of 2017, as each of our segments produced net revenue growth, including significant increases in Institutional Client Services and Investing & Lending. Within Institutional Client Services, net revenues in both Equities and Fixed Income, Currency and Commodities Client Execution (FICC Client Execution) were significantly higher. Net revenues in Investment Management were higher, as assets under supervision continued to grow, and net revenues in Investment Banking were higher, as debt underwriting results were strong.

Operating expenses were $6.62 billion for the first quarter of 2018, 21% higher than the first quarter of 2017, due to significantly higher compensation and benefits expenses, reflecting a significant increase in net revenues, and higher non-compensation expenses, reflecting both higher client activity and our investments in growth.

Our Common Equity Tier 1 (CET1) ratio as calculated in accordance with the Standardized approach and the Basel III Advanced approach, on a fully phased-in basis, was 12.1% and 11.1%, respectively, as of March 2018. See Note 20 to the condensed consolidated financial statements for further information about our capital ratios.

Business Environment

Global

During the first quarter of 2018, real gross domestic product (GDP) growth appeared to slow in most major economies. However, the pace of GDP growth remained relatively high and other indicators of economic activity indicate growth remained robust. Following a year of low volatility for global equity markets, volatility increased substantially during the first quarter of 2018, particularly in the U.S. The U.S. Federal Reserve followed an increase in the target federal funds rate in December 2017 with another increase in March 2018.

In investment banking, industry-wide announced and completed mergers and acquisitions transactions declined compared with the fourth quarter of 2017. Industry-wide debt underwriting transactions increased slightly, while industry-wide equity underwriting transactions declined compared with the fourth quarter of 2017.

United States

In the U.S., real GDP growth decreased compared with the previous quarter, consistent with a long-standing seasonal weakness in first quarter real GDP and reflecting declines in the growth rates of domestic demand and fixed investment. Measures of consumer confidence strengthened, and the pace of housing starts and home sales increased compared with the fourth quarter of 2017. The unemployment rate was 4.1% as of March 2018, unchanged from the end of 2017, and measures of inflation increased. The U.S. Federal Reserve increased its target range for the federal funds rate again in March 2018 by 25 basis points to a range of 1.50% to 1.75%. The yield on the 10-year U.S. Treasury note ended the quarter at 2.74%, 34 basis points higher compared with the end of 2017. The price of crude oil (WTI) ended the quarter at approximately $65 per barrel, an increase of 7% from the end of 2017. In equity markets, the NASDAQ Composite Index increased by 2% compared with the end of 2017, while the Dow Jones Industrial Average and the S&P 500 Index decreased by 2% and 1%, respectively.

Europe

In the Euro area, real GDP growth appeared to decrease during the quarter, while measures of inflation appeared to increase. The European Central Bank maintained its main refinancing operations rate at 0.00% and its deposit rate at (0.40)%. Measures of unemployment remained high but continued their downward trend and the Euro appreciated by 3% against the U.S. dollar compared with the end of 2017. The movements in 10-year Euro area government bond yields were mixed. In equity markets, the DAX Index, Euro Stoxx 50 Index and CAC 40 Index decreased by 6%, 4% and 3%, respectively, compared with the end of 2017. In March 2018, it was announced that the U.K. and European Union had agreed upon the terms for the transitional period of the U.K.'s withdrawal from the European Union.

In the U.K., real GDP growth decreased compared with the previous quarter. The Bank of England maintained its official bank rate at 0.50%, and the British pound appreciated by 4% against the U.S. dollar. Yields on 10-year government bonds in the U.K. increased and, in equity markets, the FTSE 100 Index decreased by 8% compared with the end of 2017.

Asia

In Japan, real GDP growth appeared to decrease compared with the fourth quarter of 2017. The Bank of Japan maintained its asset purchase program and continued to target a yield on 10-year Japanese government bonds of approximately 0%. The yield on 10-year Japanese government bonds was essentially unchanged, the U.S. dollar depreciated by 6% against the Japanese yen and the Nikkei 225 Index decreased by 6% compared with the end of 2017.

In China, real GDP growth decreased during the quarter, while measures of inflation increased. The U.S. dollar depreciated by 3% against the Chinese yuan compared with the end of 2017, while in equity markets, the Hang Seng Index increased by 1% and the Shanghai Composite Index decreased by 4%.

In India, economic growth appeared to increase compared with the previous quarter. The U.S. dollar appreciated by 2% against the Indian rupee, and the BSE Sensex Index decreased by 3% compared with the end of 2017.

Critical Accounting Policies

Fair Value

Fair Value Hierarchy. Financial instruments owned and financial instruments sold, but not yet purchased (i.e., inventory), as well as certain other financial assets and financial liabilities, are included in our condensed consolidated statements of financial condition at fair value (i.e., marked-to-market), with related gains or losses generally recognized in our condensed consolidated statements of earnings. The use of fair value to measure financial instruments is fundamental to our risk management practices and is our most critical accounting policy.

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We measure certain financial assets and financial liabilities as a portfolio (i.e., based on its net exposure to market and/or credit risks). In determining fair value, the hierarchy under U.S. generally accepted accounting principles (U.S. GAAP) gives (i) the highest priority to unadjusted quoted prices in active markets for identical, unrestricted assets or liabilities (level 1 inputs), (ii) the next priority to inputs other than level 1 inputs that are observable, either directly or indirectly (level 2 inputs), and (iii) the lowest priority to inputs that cannot be observed in market activity (level 3 inputs). In evaluating the significance of a valuation input, we consider, among other factors, a portfolio's net risk exposure to that input. Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to their fair value measurement.

The fair values for substantially all of our financial assets and financial liabilities are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. Certain level 2 and level 3 financial assets and financial liabilities may require appropriate valuation adjustments that a market participant would require to arrive at fair value for factors such as counterparty and our credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads.

Instruments classified in level 3 of the fair value hierarchy are those which require one or more significant inputs that are not observable. As of March 2018 and December 2017, level 3 financial assets represented 2.2% and 2.1%, respectively, of our total assets. See Notes 5 through 8 to the condensed consolidated financial statements for further information about level 3 financial assets, including changes in level 3 financial assets and related fair value measurements. Absent evidence to the contrary, instruments classified in level 3 of the fair value hierarchy are initially valued at transaction price, which is considered to be the best initial estimate of fair value. Subsequent to the transaction date, we use other methodologies to determine fair value, which vary based on the type of instrument. Estimating the fair value of level 3 financial instruments requires judgments to be made. These judgments include:

- Determining the appropriate valuation methodology and/or model for each type of level 3 financial instrument;
- Determining model inputs based on an evaluation of all relevant empirical market data, including prices evidenced by market transactions, interest rates, credit spreads, volatilities and correlations; and
- Determining appropriate valuation adjustments, including those related to illiquidity or counterparty credit quality.

Regardless of the methodology, valuation inputs and assumptions are only changed when corroborated by substantive evidence.

Controls Over Valuation of Financial Instruments. Market makers and investment professionals in our revenue-producing units are responsible for pricing our financial instruments. Our control infrastructure is independent of the revenue-producing units and is fundamental to ensuring that all of our financial instruments are appropriately valued at market-clearing levels. In the event that there is a difference of opinion in situations where estimating the fair value of financial instruments requires judgment (e.g., calibration to market comparables or trade comparison, as described below), the final valuation decision is made by senior managers in control and support functions. This independent price verification is critical to ensuring that our financial instruments are properly valued.

Price Verification. All financial instruments at fair value classified in levels 1, 2 and 3 of the fair value hierarchy are subject to our independent price verification process. The objective of price verification is to have an informed and independent opinion with regard to the valuation of financial instruments under review. Instruments that have one or more significant inputs which cannot be corroborated by external market data are classified in level 3 of the fair value hierarchy. Price verification strategies utilized by our independent control and support functions include:

- **Trade Comparison.** Analysis of trade data (both internal and external, where available) is used to determine the most relevant pricing inputs and valuations.
- **External Price Comparison.** Valuations and prices are compared to pricing data obtained from third parties (e.g., brokers or dealers, Markit, Bloomberg, IDC, TRACE). Data obtained from various sources is compared to ensure consistency and validity. When broker or dealer quotations or third-party pricing vendors are used for valuation or price verification, greater priority is generally given to executable quotations.
- **Calibration to Market Comparables.** Market-based transactions are used to corroborate the valuation of positions with similar characteristics, risks and components.
- **Relative Value Analyses.** Market-based transactions are analyzed to determine the similarity, measured in terms of risk, liquidity and return, of one instrument relative to another or, for a given instrument, of one maturity relative to another.
- **Collateral Analyses.** Margin calls on derivatives are analyzed to determine implied values, which are used to corroborate our valuations.
- **Execution of Trades.** Where appropriate, trading desks are instructed to execute trades in order to provide evidence of market-clearing levels.
- **Backtesting.** Valuations are corroborated by comparison to values realized upon sales.

See Notes 5 through 8 to the condensed consolidated financial statements for further information about fair value measurements.

Review of Net Revenues. Independent control and support functions ensure adherence to our pricing policy through a combination of daily procedures, including the explanation and attribution of net revenues based on the underlying factors. Through this process, we independently validate net revenues, identify and resolve potential fair value or trade booking issues on a timely basis and seek to ensure that risks are being properly categorized and quantified.

Review of Valuation Models. Our independent model risk management group (Model Risk Management), consisting of quantitative professionals who are separate from model developers, performs an independent model review and validation process of our valuation models. New or changed models are reviewed and approved prior to being put into use. Models are evaluated and re-approved annually to assess the impact of any changes in the product or market and any market developments in pricing theories. See "Risk Management — Model Risk Management" for further information about the review and validation of our valuation models.

Goodwill and Identifiable Intangible Assets

Goodwill. Goodwill is the cost of acquired companies in excess of the fair value of net assets, including identifiable intangible assets, at the acquisition date.

Goodwill is assessed for impairment annually in the fourth quarter or more frequently if events occur or circumstances change that indicate an impairment may exist. When assessing goodwill for impairment, first, qualitative factors are assessed to determine whether it is more likely than not that the estimated fair value of a reporting unit is less than its estimated carrying value. If the results of the qualitative assessment are not conclusive, a quantitative goodwill test is performed by comparing the estimated fair value of each reporting unit with its estimated carrying value.

In the fourth quarter of 2017, we assessed goodwill for impairment for each of our reporting units by performing a qualitative assessment and determined that goodwill for each reporting unit was not impaired. There were no events or changes in circumstances during the three months ended March 2018 that would indicate that it was more likely than not that the estimated fair value of each of the reporting units did not exceed its respective estimated carrying value as of March 2018.

See Note 13 to the condensed consolidated financial statements for further information about our goodwill.

Estimating the fair value of our reporting units requires management to make judgments. Critical inputs to the fair value estimates include projected earnings and attributed equity. There is inherent uncertainty in the projected earnings. The estimated net book value of each reporting unit reflects an allocation of total shareholders' equity and represents the estimated amount of total shareholders' equity required to support the activities of the reporting unit under currently applicable regulatory capital requirements. See "Equity Capital Management and Regulatory Capital" for further information about our capital requirements.

If we experience a prolonged or severe period of weakness in the business environment, financial markets or our performance, or additional increases in capital requirements, our goodwill could be impaired in the future. In addition, significant changes to other inputs of the quantitative goodwill test could cause the estimated fair value of our reporting units to decline, which could result in an impairment of goodwill in the future.

Identifiable Intangible Assets. We amortize our identifiable intangible assets over their estimated useful lives generally using the straight-line method. Identifiable intangible assets are tested for impairment whenever events or changes in circumstances suggest that an asset's or asset group's carrying value may not be fully recoverable.

A prolonged or severe period of market weakness, or significant changes in regulation, could adversely impact our businesses and impair the value of our identifiable intangible assets. In addition, certain events could indicate a potential impairment of our identifiable intangible assets, including weaker business performance resulting in a decrease in our customer base and decreases in revenues from customer contracts and relationships. Management judgment is required to evaluate whether indications of potential impairment have occurred, and to test intangible assets for impairment, if required.

An impairment, generally calculated as the difference between the estimated fair value and the carrying value of an asset or asset group, is recognized if the total of the estimated undiscounted cash flows relating to the asset or asset group is less than the corresponding carrying value.

See Note 13 to the condensed consolidated financial statements for further information about our identifiable intangible assets.

Recent Accounting Developments

See Note 3 to the condensed consolidated financial statements for information about Recent Accounting Developments.

Use of Estimates

U.S. GAAP requires management to make certain estimates and assumptions. In addition to the estimates we make in connection with fair value measurements, the accounting for goodwill and identifiable intangible assets, and discretionary compensation accruals, the use of estimates and assumptions is also important in determining income tax expense related to the Tax Cuts and Jobs Act (Tax Legislation), provisions for losses that may arise from litigation and regulatory proceedings (including governmental investigations), the allowance for losses on loans receivable and lending commitments held for investment, and provisions for losses that may arise from tax audits.

A substantial portion of our compensation and benefits represents discretionary compensation, which is finalized at year-end. We believe the most appropriate way to allocate estimated annual discretionary compensation among interim periods is in proportion to the net revenues earned in such periods. In addition to the level of net revenues, our overall compensation expense in any given year is also influenced by, among other factors, overall financial performance, prevailing labor markets, business mix, the structure of our share-based compensation programs and the external environment. See "Results of Operations — Operating Expenses" below for information about our ratio of compensation and benefits to net revenues.

We estimate and provide for potential losses that may arise out of litigation and regulatory proceedings to the extent that such losses are probable and can be reasonably estimated. In addition, we estimate the upper end of the range of reasonably possible aggregate loss in excess of the related reserves for litigation and regulatory proceedings where we believe the risk of loss is more than slight. See Notes 18 and 27 to the condensed consolidated financial statements for information about certain judicial, litigation and regulatory proceedings.

Significant judgment is required in making these estimates and our final liabilities may ultimately be materially different. Our total estimated liability in respect of litigation and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors, the progress of each case, proceeding or investigation, our experience and the experience of others in similar cases, proceedings or investigations, and the opinions and views of legal counsel.

We have made assumptions and judgments regarding interpretations of Tax Legislation. In addition, in accounting for income taxes, we recognize tax positions in the financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. See Note 24 to the condensed consolidated financial statements for further information about income taxes.

We also estimate and record an allowance for losses related to our loans receivable and lending commitments held for investment. Management's estimate of loan losses entails judgment about loan collectability at the reporting dates, and there are uncertainties inherent in those judgments. See Note 9 to the condensed consolidated financial statements for further information about the allowance for losses on loans receivable and lending commitments held for investment.

Results of Operations

The composition of our net revenues has varied over time as financial markets and the scope of our operations have changed. The composition of net revenues can also vary over the shorter term due to fluctuations in U.S. and global economic and market conditions. See "Risk Factors" in Part I, Item 1A of the 2017 Form 10-K for further information about the impact of economic and market conditions on our results of operations.

Financial Overview

The table below presents an overview of our financial results and selected financial ratios.

$ in millions, except per share amounts	Three Months Ended March **2018**	Three Months Ended March 2017
Net revenues	**$10,036**	$ 8,026
Pre-tax earnings	**$ 3,419**	$ 2,539
Net earnings	**$ 2,832**	$ 2,255
Net earnings applicable to common shareholders	**$ 2,737**	$ 2,162
Diluted earnings per common share	**$ 6.95**	$ 5.15
Annualized ROE	**15.4%**	11.4%
Annualized net earnings to average total assets	**1.2%**	1.0%
Annualized return on average total shareholders' equity	**13.7%**	10.4%
Average total shareholders' equity to average total assets	**8.5%**	9.9%
Dividend payout ratio	**10.8%**	12.6%

In the table above:

- Dividend payout ratio is calculated by dividing dividends declared per common share by diluted earnings per common share.
- Annualized ROE is calculated by dividing annualized net earnings applicable to common shareholders by average monthly common shareholders' equity. Annualized return on average total shareholders' equity is calculated by dividing annualized net earnings by average monthly total shareholders' equity. The table below presents our average common and total shareholders' equity.

$ in millions	Average for the Three Months Ended March **2018**	Average for the Three Months Ended March 2017
Total shareholders' equity	**$ 82,484**	$ 86,813
Preferred stock	**(11,366)**	(11,203)
Common shareholders' equity	**$ 71,118**	$ 75,610

Net Revenues

The table below presents our net revenues by line item in the condensed consolidated statements of earnings.

$ in millions	Three Months Ended March **2018**	Three Months Ended March 2017
Investment banking	**$ 1,793**	$1,703
Investment management	**1,639**	1,397
Commissions and fees	**862**	771
Market making	**3,204**	2,418
Other principal transactions	**1,620**	1,221
Total non-interest revenues	**9,118**	7,510
Interest income	**4,230**	2,746
Interest expense	**3,312**	2,230
Net interest income	**918**	516
Total net revenues	**$10,036**	$8,026

In the table above:

- Investment banking consists of revenues (excluding net interest) from financial advisory and underwriting assignments, as well as derivative transactions directly related to these assignments. These activities are included in our Investment Banking segment.
- Investment management consists of revenues (excluding net interest) from providing investment management services to a diverse set of clients, as well as wealth advisory services and certain transaction services to high-net-worth individuals and families. These activities are included in our Investment Management segment.
- Commissions and fees consists of revenues from executing and clearing client transactions on major stock, options and futures exchanges worldwide, as well as over-the-counter (OTC) transactions. These activities are included in our Institutional Client Services and Investment Management segments.
- Market making consists of revenues (excluding net interest) from client execution activities related to making markets in interest rate products, credit products, mortgages, currencies, commodities and equity products. These activities are included in our Institutional Client Services segment.
- Other principal transactions consists of revenues (excluding net interest) from our investing activities and the origination of loans to provide financing to clients. In addition, other principal transactions includes revenues related to our consolidated investments. These activities are included in our Investing & Lending segment.

Operating Environment. The first quarter of 2018 was characterized by better prospects for global growth, rising interest rates and higher market volatility. In addition, investor confidence improved and client engagement was higher for our market-making activities. In underwriting and other principal transactions, the environment remained relatively favorable, despite generally lower equity prices and wider credit spreads. In investment management, generally lower equity prices resulted in depreciation in equity assets, although our assets under supervision continued to grow as a result of net inflows in long-term assets.

If market-making activity levels or assets under supervision decline, or if investment banking activity levels or asset prices continue to decline, net revenues would likely be negatively impacted. See "Segment Operating Results" below for further information about the operating environment and material trends and uncertainties that may impact our results of operations.

Three Months Ended March 2018 versus March 2017

Net revenues in the condensed consolidated statements of earnings were $10.04 billion for the first quarter of 2018, 25% higher than the first quarter of 2017, due to significantly higher market making revenues, net interest income and other principal transactions revenues. In addition, investment management revenues, commissions and fees and investment banking revenues were higher.

Non-Interest Revenues. Investment banking revenues in the condensed consolidated statements of earnings were $1.79 billion for the first quarter of 2018, 5% higher than the first quarter of 2017. Revenues in financial advisory were significantly lower compared with the first quarter of 2017, reflecting a decrease in industry-wide completed mergers and acquisitions transactions. Revenues in underwriting were significantly higher compared with the first quarter of 2017, due to significantly higher revenues in debt underwriting, reflecting higher revenues from investment-grade, leveraged finance and asset-backed activity, and higher revenues in equity underwriting, primarily due to higher revenues from initial public offerings.

Investment management revenues in the condensed consolidated statements of earnings were $1.64 billion for the first quarter of 2018, 17% higher than the first quarter of 2017, due to higher management and other fees, primarily reflecting higher average assets under supervision, as well as higher incentive fees and higher transaction revenues.

Commissions and fees in the condensed consolidated statements of earnings were $862 million for the first quarter of 2018, 12% higher than the first quarter of 2017, reflecting an increase in our listed cash equity and futures volumes, generally consistent with market volumes.

Market making revenues in the condensed consolidated statements of earnings were $3.20 billion for the first quarter of 2018, 33% higher than the first quarter of 2017, due to significantly higher revenues in both equity cash products and commodities, higher revenues in equity derivative products, interest rate products, currencies and credit products. These results were partially offset by lower revenues in mortgages.

Other principal transactions revenues in the condensed consolidated statements of earnings were $1.62 billion for the first quarter of 2018, 33% higher than the first quarter of 2017, reflecting a significant increase in net gains from private equities, driven by company-specific events and corporate performance, partially offset by significantly lower net gains from public equities.

Net Interest Income. Net interest income in the condensed consolidated statements of earnings was $918 million for the first quarter of 2018, 78% higher than the first quarter of 2017, reflecting a significant increase in interest income primarily due to the impact of higher interest rates on collateralized agreements, other interest-earning assets and deposits with banks, increases in total average loans receivable and other interest-earning assets, and higher interest income from financial instruments owned due to higher yields and higher total average balances. The increase in interest income was partially offset by significantly higher interest expense primarily due to the impact of higher interest rates on other interest-bearing liabilities, collateralized financings and deposits, and increases in total average long-term borrowings, collateralized financings and deposits. See "Statistical Disclosures — Distribution of Assets, Liabilities and Shareholders' Equity" for further information about our sources of net interest income.

Operating Expenses

Our operating expenses are primarily influenced by compensation, headcount and levels of business activity. Compensation and benefits includes salaries, estimated year-end discretionary compensation, amortization of equity awards and other items such as benefits. Discretionary compensation is significantly impacted by, among other factors, the level of net revenues, overall financial performance, prevailing labor markets, business mix, the structure of our share-based compensation programs and the external environment. In addition, see "Use of Estimates" for further information about expenses that may arise from compensation and benefits, and litigation and regulatory proceedings.

The table below presents our operating expenses and total staff (including employees, consultants and temporary staff).

	Three Months Ended March	
$ in millions	**2018**	2017
Compensation and benefits	**$ 4,115**	$ 3,291
Brokerage, clearing, exchange and distribution fees	**844**	692
Market development	**182**	134
Communications and technology	**251**	223
Depreciation and amortization	**299**	257
Occupancy	**194**	176
Professional fees	**235**	205
Other expenses	**497**	509
Total non-compensation expenses	**2,502**	2,196
Total operating expenses	**$ 6,617**	$ 5,487
Total staff at period-end	**37,300**	34,100

In the table above, regulatory-related fees that are paid to exchanges, previously reported in other expenses, are now reported in brokerage, clearing, exchange and distribution fees. Reclassifications have been made to previously reported amounts to conform to the current presentation.

Three Months Ended March 2018 versus March 2017. Operating expenses in the condensed consolidated statements of earnings were $6.62 billion for the first quarter of 2018, 21% higher than the first quarter of 2017. The accrual for compensation and benefits expenses in the condensed consolidated statements of earnings was $4.12 billion for the first quarter of 2018, 25% higher than the first quarter of 2017, reflecting a significant increase in net revenues. The ratio of compensation and benefits to net revenues for the first quarter of 2018 was 41.0%, unchanged compared with the first quarter of 2017.

Non-compensation expenses in the condensed consolidated statements of earnings were $2.50 billion for the first quarter of 2018, 14% higher than the first quarter of 2017, largely driven by significantly higher brokerage, clearing, exchange and distribution fees, reflecting an increase in activity levels. In addition, expenses related to consolidated investments and our digital lending and deposit platform, *Marcus: by Goldman Sachs* (Marcus), were higher, with the increases primarily included in market development expenses, depreciation and amortization expenses and other expenses. Technology expenses increased, reflecting higher expenses related to computing services and software depreciation. The increase in non-compensation expenses compared with the first quarter of 2017 included approximately $50 million related to the new revenue recognition standard. See Note 3 to the condensed consolidated financial statements for further information about ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)."

These increases were partially offset by lower net provisions for litigation and regulatory proceedings. Net provisions for litigation and regulatory proceedings for the first quarter of 2018 were $44 million compared with $139 million for the first quarter of 2017.

As of March 2018, total staff increased 2% compared with December 2017.

Provision for Taxes

The effective income tax rate for the first quarter of 2018 was 17.2%, down from the full year tax rate of 61.5% for 2017, as 2017 included the estimated impact of Tax Legislation, which increased our effective income tax rate by 39.5 percentage points. Additionally, the decrease compared with the full year rate for 2017 reflected the impact of the lower U.S. corporate income tax rate in 2018.

The estimated impact of Tax Legislation was an increase in income tax expense of $4.40 billion for 2017. The impact of Tax Legislation may differ from this estimate, possibly materially, due to, among other things, (i) refinement of our calculations based on updated information, (ii) changes in interpretations and assumptions, (iii) guidance that may be issued and (iv) actions we may take as a result of Tax Legislation. During the three months ended March 2018, we did not make any material adjustments to this estimate.

Effective January 1, 2018, Tax Legislation reduced the U.S. corporate tax rate to 21 percent, eliminated tax deductions for certain expenses and enacted two new taxes, Base Erosion and Anti-Abuse Tax (BEAT) and Global Intangible Low Taxed Income (GILTI). BEAT is an alternative minimum tax that applies to banks that pay more than 2 percent of total deductible expenses to certain foreign subsidiaries. GILTI is a 10.5 percent tax, before allowable credits for foreign taxes paid, on the annual earnings and profits of certain foreign subsidiaries. Income tax expense associated with GILTI is recognized as incurred. Based on our current understanding of these rules, the impact of BEAT and GILTI was not material to our effective income tax rate in the first quarter of 2018 and is not expected to be material to our effective income tax rate for the remainder of 2018.

Segment Operating Results

The table below presents the net revenues, operating expenses and pre-tax earnings of our segments.

	Three Months Ended March	
$ in millions	**2018**	2017
Investment Banking		
Net revenues	**$ 1,793**	$1,703
Operating expenses	**1,010**	975
Pre-tax earnings	**$ 783**	$ 728
Institutional Client Services		
Net revenues	**$ 4,385**	$3,359
Operating expenses	**3,152**	2,544
Pre-tax earnings	**$ 1,233**	$ 815
Investing & Lending		
Net revenues	**$ 2,087**	$1,464
Operating expenses	**1,030**	750
Pre-tax earnings	**$ 1,057**	$ 714
Investment Management		
Net revenues	**$ 1,771**	$1,500
Operating expenses	**1,425**	1,218
Pre-tax earnings	**$ 346**	$ 282
Total net revenues	**$10,036**	$8,026
Total operating expenses	**6,617**	5,487
Total pre-tax earnings	**$ 3,419**	$2,539

Net revenues in our segments include allocations of interest income and interest expense to specific securities, commodities and other positions in relation to the cash generated by, or funding requirements of, such underlying positions. See Note 25 to the condensed consolidated financial statements for further information about our business segments.

Our cost drivers taken as a whole, compensation, headcount and levels of business activity, are broadly similar in each of our business segments. Compensation and benefits expenses within our segments reflect, among other factors, our overall performance, as well as the performance of individual businesses. Consequently, pre-tax margins in one segment of our business may be significantly affected by the performance of our other business segments. A description of segment operating results follows.

Investment Banking

Our Investment Banking segment consists of:

Financial Advisory. Includes strategic advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings, spin-offs, risk management and derivative transactions directly related to these client advisory assignments.

Underwriting. Includes public offerings and private placements, including local and cross-border transactions and acquisition financing, of a wide range of securities and other financial instruments, including loans, and derivative transactions directly related to these client underwriting activities.

The table below presents the operating results of our Investment Banking segment.

	Three Months Ended March	
$ in millions	**2018**	2017
Financial Advisory	**$ 586**	$ 756
Equity underwriting	**410**	311
Debt underwriting	**797**	636
Total Underwriting	**1,207**	947
Total net revenues	**1,793**	1,703
Operating expenses	**1,010**	975
Pre-tax earnings	**$ 783**	$ 728

The table below presents our financial advisory and underwriting transaction volumes.

	Three Months Ended March	
$ in billions	**2018**	2017
Announced mergers and acquisitions	**$ 243**	$ 163
Completed mergers and acquisitions	**$ 141**	$ 214
Equity and equity-related offerings	**$ 20**	$ 17
Debt offerings	**$ 76**	$ 81

In the table above:

- Volumes are per Dealogic.
- Announced and completed mergers and acquisitions volumes are based on full credit to each of the advisors in a transaction. Equity and equity-related offerings and debt offerings are based on full credit for single book managers and equal credit for joint book managers. Transaction volumes may not be indicative of net revenues in a given period. In addition, transaction volumes for prior periods may vary from amounts previously reported due to the subsequent withdrawal or a change in the value of a transaction.
- Equity and equity-related offerings includes Rule 144A and public common stock offerings, convertible offerings and rights offerings.
- Debt offerings includes non-convertible preferred stock, mortgage-backed securities, asset-backed securities and taxable municipal debt. Includes publicly registered and Rule 144A issues. Excludes leveraged loans.

Operating Environment. During the first quarter of 2018, industry-wide announced and completed mergers and acquisitions transactions declined compared with the fourth quarter of 2017.

In underwriting, the environment was mixed, but remained relatively favorable. Debt underwriting benefited from a slight increase in industry-wide transactions compared with the fourth quarter of 2017 and continued strength in acquisition-related financings.

Equity underwriting was impacted by volatility in the global equity markets as industry-wide equity underwriting transactions declined compared with the fourth quarter of 2017.

In the future, if industry-wide activity levels in mergers and acquisitions or equity underwriting continue to decline or if industry-wide activity levels in debt underwriting decline, net revenues in Investment Banking would likely be negatively impacted.

Three Months Ended March 2018 versus March 2017. Net revenues in Investment Banking were $1.79 billion for the first quarter of 2018, 5% higher than the first quarter of 2017.

Net revenues in Financial Advisory were $586 million, 22% lower than the first quarter of 2017, reflecting a decrease in industry-wide completed mergers and acquisitions transactions.

Net revenues in Underwriting were $1.21 billion, 27% higher than the first quarter of 2017, due to significantly higher net revenues in debt underwriting, reflecting higher net revenues from investment-grade, leveraged finance and asset-backed activity, and higher net revenues in equity underwriting, primarily due to higher net revenues from initial public offerings.

Operating expenses were $1.01 billion for the first quarter of 2018, 4% higher than the first quarter of 2017, due to the impact of the new revenue recognition standard. Pre-tax earnings were $783 million in the first quarter of 2018, 8% higher than the first quarter of 2017. See Note 3 to the condensed consolidated financial statements for further information about ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)."

As of March 2018, our investment banking transaction backlog increased compared with December 2017, due to significantly higher estimated net revenues from potential advisory transactions, principally related to mergers and acquisitions. This increase was partially offset by lower estimated net revenues from potential debt underwriting transactions, primarily related to investment-grade and leveraged finance transactions, and slightly lower net revenues from potential equity underwriting transactions.

Our investment banking transaction backlog represents an estimate of our future net revenues from investment banking transactions where we believe that future revenue realization is more likely than not. We believe changes in our investment banking transaction backlog may be a useful indicator of client activity levels which, over the long term, impact our net revenues. However, the time frame for completion and corresponding revenue recognition of transactions in our backlog varies based on the nature of the assignment, as certain transactions may remain in our backlog for longer periods of time and others may enter and leave within the same reporting period. In addition, our transaction backlog is subject to certain limitations, such as assumptions about the likelihood that individual client transactions will occur in the future. Transactions may be cancelled or modified, and transactions not included in the estimate may also occur.

Institutional Client Services

Our Institutional Client Services segment consists of:

FICC Client Execution. Includes client execution activities related to making markets in both cash and derivative instruments for interest rate products, credit products, mortgages, currencies and commodities.

- **Interest Rate Products.** Government bonds (including inflation-linked securities) across maturities, other government-backed securities, repurchase agreements, and interest rate swaps, options and other derivatives.
- **Credit Products.** Investment-grade corporate securities, high-yield securities, credit derivatives, exchange-traded funds, bank and bridge loans, municipal securities, emerging market and distressed debt, and trade claims.
- **Mortgages.** Commercial mortgage-related securities, loans and derivatives, residential mortgage-related securities, loans and derivatives (including U.S. government agency-issued collateralized mortgage obligations and other securities and loans), and other asset-backed securities, loans and derivatives.
- **Currencies.** Currency options, spot/forwards and other derivatives on G-10 currencies and emerging-market products.
- **Commodities.** Commodity derivatives and, to a lesser extent, physical commodities, involving crude oil and petroleum products, natural gas, base, precious and other metals, electricity, coal, agricultural and other commodity products.

Equities. Includes client execution activities related to making markets in equity products and commissions and fees from executing and clearing institutional client transactions on major stock, options and futures exchanges worldwide, as well as OTC transactions. Equities also includes our securities services business, which provides financing, securities lending and other prime brokerage services to institutional clients, including hedge funds, mutual funds, pension funds and foundations, and generates revenues primarily in the form of interest rate spreads or fees.

Market-Making Activities

As a market maker, we facilitate transactions in both liquid and less liquid markets, primarily for institutional clients, such as corporations, financial institutions, investment funds and governments, to assist clients in meeting their investment objectives and in managing their risks. In this role, we seek to earn the difference between the price at which a market participant is willing to sell an instrument to us and the price at which another market participant is willing to buy it from us, and vice versa (i.e., bid/offer spread). In addition, we maintain inventory, typically for a short period of time, in response to, or in anticipation of, client demand. We also hold inventory to actively manage our risk exposures that arise from these market-making activities. Our market-making inventory is recorded in financial instruments owned (long positions) or financial instruments sold, but not yet purchased (short positions) in our condensed consolidated statements of financial condition.

Our results are influenced by a combination of interconnected drivers, including (i) client activity levels and transactional bid/offer spreads (collectively, client activity), and (ii) changes in the fair value of our inventory and interest income and interest expense related to the holding, hedging and funding of our inventory (collectively, market-making inventory changes). Due to the integrated nature of our market-making activities, disaggregation of net revenues into client activity and market-making inventory changes is judgmental and has inherent complexities and limitations.

The amount and composition of our net revenues vary over time as these drivers are impacted by multiple interrelated factors affecting economic and market conditions, including volatility and liquidity in the market, changes in interest rates, currency exchange rates, credit spreads, equity prices and commodity prices, investor confidence, and other macroeconomic concerns and uncertainties.

In general, assuming all other market-making conditions remain constant, increases in client activity levels or bid/offer spreads tend to result in increases in net revenues, and decreases tend to have the opposite effect. However, changes in market-making conditions can materially impact client activity levels and bid/offer spreads, as well as the fair value of our inventory. For example, a decrease in liquidity in the market could have the impact of (i) increasing our bid/offer spread, (ii) decreasing investor confidence and thereby decreasing client activity levels, and (iii) wider credit spreads on our inventory positions.

The table below presents the operating results of our Institutional Client Services segment.

	Three Months Ended March	
$ in millions	**2018**	2017
FICC Client Execution	**$2,074**	$1,685
Equities client execution	**1,062**	552
Commissions and fees	**817**	738
Securities services	**432**	384
Total Equities	**2,311**	1,674
Total net revenues	**4,385**	3,359
Operating expenses	**3,152**	2,544
Pre-tax earnings	**$1,233**	$ 815

The table below presents net revenues of our Institutional Client Services segment by line item in the condensed consolidated statements of earnings. See "Net Revenues" above for further information about market making revenues, commissions and fees, and net interest income.

$ in millions	FICC Client Execution	Total Equities	Institutional Client Services
Three Months Ended March 2018			
Market making	**$1,812**	**$1,392**	**$3,204**
Commissions and fees	**–**	**817**	**817**
Net interest income	**262**	**102**	**364**
Total net revenues	**$2,074**	**$2,311**	**$4,385**
Three Months Ended March 2017			
Market making	$1,657	$ 761	$2,418
Commissions and fees	–	738	738
Net interest income	28	175	203
Total net revenues	$1,685	$1,674	$3,359

In the table above:

- The difference between commissions and fees and those in the condensed consolidated statements of earnings represents commissions and fees included in our Investment Management segment.
- See Note 25 to the condensed consolidated financial statements for net interest income by business segment.
- The primary driver of net revenues for FICC Client Execution, for the periods in the table above, was client activity.

Operating Environment. During the first quarter of 2018, the operating environment for Institutional Client Services was characterized by better prospects for global growth, rising interest rates and higher market volatility, with the VIX peaking above 37 in early February. In addition, investor confidence improved and client engagement was higher following a challenging 2017. Global equity markets were higher in January, before decreasing in the second half of the quarter to end generally lower (with the MSCI World Index down 1%). Oil prices increased during the quarter to approximately $65 per barrel (WTI), while natural gas prices declined to $2.73 per million British thermal units. In credit markets, spreads widened during the quarter. If activity levels were to decline, net revenues in Institutional Client Services would likely be negatively impacted. See "Business Environment" above for further information about economic and market conditions in the global operating environment during the quarter.

Three Months Ended March 2018 versus March 2017. Net revenues in Institutional Client Services were $4.39 billion for the first quarter of 2018, 31% higher than the first quarter of 2017.

Net revenues in FICC Client Execution were $2.07 billion for the first quarter of 2018, 23% higher than the first quarter of 2017, primarily reflecting the impact of improved market-making conditions on our inventory.

The following provides details of our FICC Client Execution net revenues by business, compared with results in the first quarter of 2017:

- Net revenues in currencies and commodities were significantly higher, primarily reflecting the impact of improved market-making conditions on our inventory.
- Net revenues in credit products were significantly higher, primarily reflecting higher client activity.
- Net revenues in interest rate products were lower, primarily reflecting lower client activity.
- Net revenues in mortgages were lower, reflecting lower client activity.

Net revenues in Equities were $2.31 billion for the first quarter of 2018, 38% higher than the first quarter of 2017, primarily due to significantly higher net revenues in equities client execution, reflecting significantly higher results in both derivatives and cash products. In addition, commissions and fees were higher, reflecting an increase in our listed cash equity and futures volumes, generally consistent with market volumes. Net revenues in securities services were higher, reflecting higher average customer balances.

Operating expenses were $3.15 billion for the first quarter of 2018, 24% higher than the first quarter of 2017, primarily due to increased compensation and benefits expenses, reflecting higher net revenues. In addition, higher brokerage, clearing, exchange and distribution fees were offset by lower net provisions for litigation and regulatory proceedings. Pre-tax earnings were $1.23 billion in the first quarter of 2018, 51% higher than the first quarter of 2017.

Investing & Lending

Investing & Lending includes our investing activities and the origination of loans, including our relationship lending activities, to provide financing to clients. These investments and loans are typically longer-term in nature. We make investments, some of which are consolidated, including through our merchant banking business and our special situations group, in debt securities and loans, public and private equity securities, infrastructure and real estate entities. Some of these investments are made indirectly through funds that we manage. We also make unsecured and secured loans to retail clients through our digital platforms, *Marcus* and *Goldman Sachs Private Bank Select* (GS Select), respectively.

The table below presents the operating results of our Investing & Lending segment.

	Three Months Ended March	
$ in millions	**2018**	2017
Equity securities	**$1,069**	$ 798
Debt securities and loans	**1,018**	666
Total net revenues	**2,087**	1,464
Operating expenses	**1,030**	750
Pre-tax earnings	**$1,057**	$ 714

Operating Environment. Although the first quarter of 2018 was characterized by generally lower global equity prices and wider credit spreads, our Investing & Lending results were strong. Our investments in equities had net gains from company-specific events, including sales, and corporate performance. Results for investments in debt securities and loans reflected continued growth in loans receivable, resulting in higher net interest income, and mark-to-market gains driven by underlying credit fundamentals and specific events. If macroeconomic concerns negatively affect corporate performance, company-specific events or the funding of loans, or if global equity markets continue to decline or credit spreads continue to widen, net revenues in Investing & Lending would likely be negatively impacted.

Three Months Ended March 2018 versus March 2017. Net revenues in Investing & Lending were $2.09 billion for the first quarter of 2018, 43% higher than the first quarter of 2017.

Net revenues in equity securities were $1.07 billion, including $1.00 billion of net gains from private equities and $70 million in net gains from public equities. Net revenues in equity securities were 34% higher than the first quarter of 2017, reflecting a significant increase in net gains from private equities, driven by company-specific events and corporate performance, partially offset by significantly lower net gains from public equities. Of the $1.07 billion of net revenues in equity securities, approximately 55% was driven by net gains from company-specific events, such as sales, and public equities.

Net revenues in debt securities and loans were $1.02 billion, 53% higher than the first quarter of 2017, primarily driven by significantly higher net interest income (the first quarter of 2018 included more than $550 million of net interest income in debt securities and loans).

Operating expenses were $1.03 billion for the first quarter of 2018, 37% higher than the first quarter of 2017, primarily due to increased compensation and benefits expenses, reflecting higher net revenues, and increased expenses related to consolidated investments and Marcus. Pre-tax earnings were $1.06 billion in the first quarter of 2018, 48% higher than the first quarter of 2017.

Investment Management

Investment Management provides investment management services and offers investment products (primarily through separately managed accounts and commingled vehicles, such as mutual funds and private investment funds) across all major asset classes to a diverse set of institutional and individual clients. Investment Management also offers wealth advisory services provided by our subsidiary, The Ayco Company, L.P., including portfolio management and financial planning and counseling, and brokerage and other transaction services to high-net-worth individuals and families.

Assets under supervision (AUS) include client assets where we earn a fee for managing assets on a discretionary basis. This includes net assets in our mutual funds, hedge funds, credit funds and private equity funds (including real estate funds), and separately managed accounts for institutional and individual investors. Assets under supervision also include client assets invested with third-party managers, bank deposits and advisory relationships where we earn a fee for advisory and other services, but do not have investment discretion. Assets under supervision do not include the self-directed brokerage assets of our clients. Long-term assets under supervision represent assets under supervision excluding liquidity products. Liquidity products represent money market and bank deposit assets.

Assets under supervision typically generate fees as a percentage of net asset value, which vary by asset class and distribution channel and are affected by investment performance as well as asset inflows and redemptions. Asset classes such as alternative investment and equity assets typically generate higher fees relative to fixed income and liquidity product assets. The average effective management fee (which excludes non-asset-based fees) we earned on our assets under supervision was 35 basis points for both the three months ended March 2018 and March 2017.

In certain circumstances, we are also entitled to receive incentive fees based on a percentage of a fund's or a separately managed account's return, or when the return exceeds a specified benchmark or other performance targets.

The table below presents the operating results of our Investment Management segment.

	Three Months Ended March	
$ in millions	**2018**	2017
Management and other fees	**$1,346**	$1,219
Incentive fees	**213**	121
Transaction revenues	**212**	160
Total net revenues	**1,771**	1,500
Operating expenses	**1,425**	1,218
Pre-tax earnings	**$ 346**	$ 282

The table below presents our period-end assets under supervision by asset class.

	Three Months Ended March	
$ in billions	**2018**	2017
Alternative investments	**$ 168**	$ 156
Equity	**322**	279
Fixed income	**668**	615
Total long-term AUS	**1,158**	1,050
Liquidity products	**340**	323
Total AUS	**$1,498**	$1,373

In the table above, alternative investments primarily includes hedge funds, credit funds, private equity, real estate, currencies, commodities and asset allocation strategies.

The table below presents our period-end assets under supervision by distribution channel.

	Three Months Ended March	
$ in billions	**2018**	2017
Institutional	**$ 583**	$ 515
High-net-worth individuals	**462**	435
Third-party distributed	**453**	423
Total	**$1,498**	$1,373

The table below presents a summary of the changes in our assets under supervision.

$ in billions	Three Months Ended March 2018	2017
Beginning balance	**$1,494**	$1,379
Net inflows/(outflows):		
Alternative investments	**(1)**	2
Equity	**5**	(3)
Fixed income	**9**	6
Total long-term AUS net inflows/(outflows)	**13**	5
Liquidity products	**(5)**	(35)
Total AUS net inflows/(outflows)	**8**	(30)
Net market appreciation/(depreciation)	**(4)**	24
Ending balance	**$1,498**	$1,373

In the table above, total long-term AUS net inflows/(outflows) for the first quarter of 2017 included $5 billion of equity asset outflows in connection with the divestiture of our local Australian-focused investment capabilities and fund platform.

The table below presents our average monthly assets under supervision by asset class.

$ in billions	Average for the Three Months Ended March 2018	2017
Alternative investments	**$ 169**	$ 155
Equity	**328**	272
Fixed income	**665**	609
Total long-term AUS	**1,162**	1,036
Liquidity products	**336**	339
Total AUS	**$1,498**	$1,375

Operating Environment. During the first quarter of 2018, Investment Management operated in an environment characterized by generally lower equity prices, resulting in depreciation in equity assets. However, our long-term assets under supervision increased from net inflows in fixed income and equity assets. Liquidity products had seasonal net outflows, which followed net inflows in the fourth quarter of 2017. The mix of our average assets under supervision between long-term assets under supervision and liquidity products was essentially unchanged compared with the fourth quarter of 2017. In the future, if asset prices continue to decline, or investors favor assets that typically generate lower fees or investors withdraw their assets, net revenues in Investment Management would likely be negatively impacted.

Three Months Ended March 2018 versus March 2017. Net revenues in Investment Management were $1.77 billion for the first quarter of 2018, 18% higher than the first quarter of 2017, due to higher management and other fees, primarily reflecting higher average assets under supervision, as well as higher incentive fees and higher transaction revenues.

During the quarter, total assets under supervision increased $4 billion to $1.50 trillion. Long-term assets under supervision increased $9 billion, due to net inflows of $13 billion, reflecting inflows in fixed income and equity assets, partially offset by net market depreciation of $4 billion, primarily in equity assets. Liquidity products decreased $5 billion.

Operating expenses were $1.43 billion for the first quarter of 2018, 17% higher than the first quarter of 2017, primarily due to increased compensation and benefits expenses, reflecting higher net revenues and, to a lesser extent, the impact of the new revenue recognition standard. Pre-tax earnings were $346 million in the first quarter of 2018, 23% higher than the first quarter of 2017. See Note 3 to the condensed consolidated financial statements for further information about ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)."

Geographic Data

See Note 25 to the condensed consolidated financial statements for a summary of our total net revenues and pre-tax earnings by geographic region.

Balance Sheet and Funding Sources

Balance Sheet Management

One of our risk management disciplines is our ability to manage the size and composition of our balance sheet. While our asset base changes due to client activity, market fluctuations and business opportunities, the size and composition of our balance sheet also reflects factors including (i) our overall risk tolerance, (ii) the amount of equity capital we hold and (iii) our funding profile, among other factors. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" for information about our equity capital management process.

Although our balance sheet fluctuates on a day-to-day basis, our total assets at quarter-end and year-end dates are generally not materially different from those occurring within our reporting periods.

In order to ensure appropriate risk management, we seek to maintain a sufficiently liquid balance sheet and have processes in place to dynamically manage our assets and liabilities which include (i) balance sheet planning, (ii) balance sheet limits, (iii) monitoring of key metrics and (iv) scenario analyses.

Balance Sheet Planning. We prepare a balance sheet plan that combines our projected total assets and composition of assets with our expected funding sources over a three-year time horizon. This plan is reviewed quarterly and may be adjusted in response to changing business needs or market conditions. The objectives of this planning process are:

- To develop our balance sheet projections, taking into account the general state of the financial markets and expected business activity levels, as well as regulatory requirements;
- To allow business risk managers and managers from our independent control and support functions to objectively evaluate balance sheet limit requests from business managers in the context of our overall balance sheet constraints, including our liability profile and equity capital levels, and key metrics; and
- To inform the target amount, tenor and type of funding to raise, based on our projected assets and contractual maturities.

Business risk managers and managers from our independent control and support functions, along with business managers, review current and prior period information and expectations for the year to prepare our balance sheet plan. The specific information reviewed includes asset and liability size and composition, limit utilization, risk and performance measures, and capital usage.

Our consolidated balance sheet plan, including our balance sheets by business, funding projections, and projected key metrics, is reviewed and approved by the Firmwide Finance Committee. See "Risk Management — Overview and Structure of Risk Management" for an overview of our risk management structure.

Balance Sheet Limits. The Firmwide Finance Committee has the responsibility of reviewing and approving balance sheet limits. These limits are set at levels which are close to actual operating levels, rather than at levels which reflect our maximum risk appetite, in order to ensure prompt escalation and discussion among business managers and managers in our independent control and support functions on a routine basis. The Firmwide Finance Committee reviews and approves balance sheet limits on a quarterly basis and may also approve changes in limits on a more frequent basis in response to changing business needs or market conditions. In addition, the Risk Governance Committee sets aged inventory limits for certain financial instruments as a disincentive to hold inventory over longer periods of time. Requests for changes in limits are evaluated after giving consideration to their impact on our key metrics. Compliance with limits is monitored on a daily basis by business risk managers, as well as managers in our independent control and support functions.

Monitoring of Key Metrics. We monitor key balance sheet metrics daily both by business and on a consolidated basis, including asset and liability size and composition, limit utilization and risk measures. We allocate assets to businesses and review and analyze movements resulting from new business activity as well as market fluctuations.

Scenario Analyses. We conduct various scenario analyses including as part of the Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Tests (DFAST), as well as our resolution and recovery planning. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" below for further information about these scenario analyses. These scenarios cover short-term and long-term time horizons using various macroeconomic and firm-specific assumptions, based on a range of economic scenarios. We use these analyses to assist us in developing our longer-term balance sheet management strategy, including the level and composition of assets, funding and equity capital. Additionally, these analyses help us develop approaches for maintaining appropriate funding, liquidity and capital across a variety of situations, including a severely stressed environment.

Balance Sheet Allocation

In addition to preparing our condensed consolidated statements of financial condition in accordance with U.S. GAAP, we prepare a balance sheet that generally allocates assets to our businesses, which is a non-GAAP presentation and may not be comparable to similar non-GAAP presentations used by other companies. We believe that presenting our assets on this basis is meaningful because it is consistent with the way management views and manages risks associated with our assets and better enables investors to assess the liquidity of our assets.

The table below presents our balance sheet allocation.

	As of	
$ in millions	**March 2018**	December 2017
GCLA, segregated assets and other	**$297,920**	$285,270
Secured client financing	**158,394**	164,123
Inventory	**228,191**	216,883
Secured financing agreements	**78,740**	64,991
Receivables	**54,001**	36,750
Institutional Client Services	**360,932**	318,624
Public equity	**1,562**	2,072
Private equity	**21,294**	20,253
Total equity	**22,856**	22,325
Loans receivable	**71,697**	65,933
Loans, at fair value	**14,970**	14,877
Total loans	**86,667**	80,810
Debt securities	**8,823**	8,797
Other	**10,534**	8,481
Investing & Lending	**128,880**	120,413
Total inventory and related assets	**489,812**	439,037
Other assets	**27,409**	28,346
Total assets	**$973,535**	$916,776

The following is a description of the captions in the table above:

- **Global Core Liquid Assets (GCLA), Segregated Assets and Other.** We maintain liquidity to meet a broad range of potential cash outflows and collateral needs in a stressed environment. See "Risk Management — Liquidity Risk Management" below for details on the composition and sizing of our GCLA. We also segregate cash and securities for regulatory and other purposes related to client activity. Securities are segregated from our own inventory, as well as from collateral obtained through securities borrowed or resale agreements. In addition, we maintain other unrestricted operating cash balances, primarily for use in specific currencies, entities, or jurisdictions where we do not have immediate access to parent company liquidity.

- **Secured Client Financing.** We provide collateralized financing for client positions, including margin loans secured by client collateral, securities borrowed, and resale agreements primarily collateralized by government obligations. Our secured client financing arrangements, which are generally short-term, are accounted for at fair value or at amounts that approximate fair value, and include daily margin requirements to mitigate counterparty credit risk.

- **Institutional Client Services.** In Institutional Client Services, we maintain inventory positions to facilitate market making in fixed income, equity, currency and commodity products. Additionally, as part of market-making activities, we enter into resale or securities borrowing arrangements to obtain securities or use our own inventory to cover transactions in which we or our clients have sold securities that have not yet been purchased. The receivables in Institutional Client Services primarily relate to securities transactions.

- **Investing & Lending.** Our Investing & Lending activities, which are typically longer-term, include investing and lending activities across various asset classes, primarily debt securities and loans, and public and private equity securities. These activities include making investments, some of which are consolidated, through our merchant banking business and our special situations group. Other Investing & Lending primarily includes receivables from customers and counterparties.

Equity. We make corporate, infrastructure, real estate and other equity-related investments. As of March 2018, approximately 30% of total equity was in investments made in 2011 or earlier, approximately 30% was in investments made during 2012 through 2014, and approximately 40% was in investments made since the beginning of 2015.

The table below presents the percentage concentration of total equity by region.

	As of	
$ in millions	**March 2018**	December 2017
Equity	**$22,856**	$22,325
Americas	**52%**	54%
Europe, Middle East and Africa	**19%**	18%
Asia	**29%**	28%
Total	**100%**	100%

Loans. We provide financing to corporate clients and Private Wealth Management (PWM) clients. We also make unsecured and secured loans to retail clients through our digital platforms, Marcus and GS Select, respectively.

The table below presents details about loans.

$ in millions	Loans Receivable	Loans, at Fair Value	Total
As of March 2018			
Loans by Type			
Corporate loans	**$33,880**	**$ 4,600**	**$38,480**
Loans to PWM clients	**16,946**	**6,884**	**23,830**
Loans backed by:			
Commercial real estate	**9,252**	**1,653**	**10,905**
Residential real estate	**6,713**	**1,003**	**7,716**
Marcus loans	**2,384**	**–**	**2,384**
Other loans	**3,286**	**830**	**4,116**
Allowance for loan losses	**(764)**	**–**	**(764)**
Total	**$71,697**	**$14,970**	**$86,667**
Loans by Region			
Americas	**65%**	**15%**	**80%**
Europe, Middle East and Africa	**15%**	**2%**	**17%**
Asia	**3%**	**–%**	**3%**
Total	**83%**	**17%**	**100%**
As of December 2017			
Loans by Type			
Corporate loans	$30,749	$ 3,924	$34,673
Loans to PWM clients	16,591	7,102	23,693
Loans backed by:			
Commercial real estate	7,987	1,825	9,812
Residential real estate	6,234	1,043	7,277
Marcus loans	1,912	–	1,912
Other loans	3,263	983	4,246
Allowance for loan losses	(803)	–	(803)
Total	$65,933	$14,877	$80,810
Loans by Region			
Americas	64%	13%	77%
Europe, Middle East and Africa	14%	4%	18%
Asia	4%	1%	5%
Total	82%	18%	100%

See Note 9 to the condensed consolidated financial statements for further information about loans receivable.

- **Other Assets.** Other assets are generally less liquid, nonfinancial assets, including property, leasehold improvements and equipment, goodwill and identifiable intangible assets, income tax-related receivables and miscellaneous receivables.

The table below presents the reconciliation of this balance sheet allocation to our U.S. GAAP balance sheet.

$ in millions	GCLA Segregated Assets and Other	Secured Client Financing	Institutional Client Services	Investing & Lending	Total
As of March 2018					
Cash and cash equivalents	**$120,503**	**$ –**	**$ –**	**$ –**	**$120,503**
Securities purchased under agreements to resell	**79,580**	**28,213**	**23,288**	**380**	**131,461**
Securities borrowed	**36,265**	**85,850**	**55,452**	**–**	**177,567**
Receivables from brokers, dealers and clearing organizations	**–**	**4,382**	**33,364**	**–**	**37,746**
Receivables from customers and counterparties	**–**	**39,949**	**20,637**	**9,687**	**70,273**
Loans receivable	**–**	**–**	**–**	**71,697**	**71,697**
Financial instruments owned	**61,572**	**–**	**228,191**	**47,116**	**336,879**
Subtotal	**$297,920**	**$158,394**	**$360,932**	**$128,880**	**$946,126**
Other assets					**27,409**
Total assets					**$973,535**
As of December 2017					
Cash and cash equivalents	$110,051	$ –	$ –	$ –	$110,051
Securities purchased under agreements to resell	73,277	26,202	20,931	412	120,822
Securities borrowed	49,242	97,546	44,060	–	190,848
Receivables from brokers, dealers and clearing organizations	–	7,712	16,945	19	24,676
Receivables from customers and counterparties	–	32,663	19,805	7,644	60,112
Loans receivable	–	–	–	65,933	65,933
Financial instruments owned	52,700	–	216,883	46,405	315,988
Subtotal	$285,270	$164,123	$318,624	$120,413	$888,430
Other assets					28,346
Total assets					$916,776

In the table above:

- Total assets for Institutional Client Services and Investing & Lending represent inventory and related assets. These amounts differ from total assets by business segment disclosed in Note 25 to the condensed consolidated financial statements because total assets disclosed in Note 25 include allocations of our GCLA, segregated assets and other, secured client financing and other assets.
- See "Balance Sheet Analysis and Metrics" for explanations on the changes in our balance sheet from December 2017 to March 2018.

Balance Sheet Analysis and Metrics

As of March 2018, total assets in our condensed consolidated statements of financial condition were $973.54 billion, an increase of $56.76 billion from December 2017, primarily reflecting increases in financial instruments owned of $20.89 billion, receivables from brokers, dealers and clearing organizations of $13.07 billion, cash and cash equivalents of $10.45 billion and receivables from customers and counterparties of $10.16 billion, partially offset by a net decrease in collateralized agreements of $2.64 billion. The increase in financial instruments owned primarily reflected higher client activity in equity securities and non-U.S. government and agency obligations. The increases in receivables from brokers, dealers and clearing organizations and receivables from customers and counterparties reflected client activity. The increase in cash and cash equivalents and the net decrease in collateralized agreements reflected the impact of client and firm activity.

As of March 2018, total liabilities in our condensed consolidated statements of financial condition were $889.96 billion, an increase of $55.42 billion from December 2017, primarily reflecting increases in deposits of $12.34 billion, financial instruments sold, but not yet purchased of $12.24 billion, securities sold under agreements to repurchase of $9.97 billion and unsecured long-term borrowings of $8.21 billion. The increase in deposits primarily reflected increases in institutional and Marcus deposits. The increase in financial instruments sold, but not yet purchased reflected higher client activity in equity securities and corporate debt instruments. The increase in securities sold under agreements to repurchase primarily reflected firm and client activity. The increase in unsecured long-term borrowings was primarily due to net new issuances.

As of March 2018 and December 2017, our total securities sold under agreements to repurchase, accounted for as collateralized financings, were $94.69 billion and $84.72 billion, respectively, which were both 2% lower than the daily average amount of repurchase agreements over the respective quarters. As of March 2018, the decrease in our repurchase agreements relative to the daily average during the quarter resulted from firm and client activity at the end of the period.

The level of our repurchase agreements fluctuates between and within periods, primarily due to providing clients with access to highly liquid collateral, such as liquid government and agency obligations, through collateralized financing activities.

The table below presents information about our balance sheet and our leverage ratios.

	As of	
$ in millions	**March 2018**	December 2017
Total assets	**$973,535**	$916,776
Unsecured long-term borrowings	**$225,899**	$217,687
Total shareholders' equity	**$ 83,579**	$ 82,243
Leverage ratio	**11.6x**	11.1x
Debt to equity ratio	**2.7x**	2.6x

In the table above:

- The leverage ratio equals total assets divided by total shareholders' equity and measures the proportion of equity and debt we use to finance assets. This ratio is different from the leverage ratios included in Note 20 to the condensed consolidated financial statements.
- The debt to equity ratio equals unsecured long-term borrowings divided by total shareholders' equity.

The table below presents information about our shareholders' equity and book value per common share, including the reconciliation of total shareholders' equity to tangible common shareholders' equity.

	As of	
$ in millions, except per share amounts	**March 2018**	December 2017
Total shareholders' equity	**$ 83,579**	$ 82,243
Preferred stock	**(11,203)**	(11,853)
Common shareholders' equity	**72,376**	70,390
Goodwill and identifiable intangible assets	**(4,049)**	(4,038)
Tangible common shareholders' equity	**$ 68,327**	$ 66,352
Book value per common share	**$ 186.73**	$ 181.00
Tangible book value per common share	**$ 176.28**	$ 170.61

In the table above:

- Tangible common shareholders' equity equals total shareholders' equity less preferred stock, goodwill and identifiable intangible assets. We believe that tangible common shareholders' equity is meaningful because it is a measure that we and investors use to assess capital adequacy. Tangible common shareholders' equity is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies.

- Book value per common share and tangible book value per common share are based on common shares outstanding and restricted stock units granted to employees with no future service requirements (collectively, basic shares) of 387.6 million and 388.9 million as of March 2018 and December 2017, respectively. We believe that tangible book value per common share (tangible common shareholders' equity divided by basic shares) is meaningful because it is a measure that we and investors use to assess capital adequacy. Tangible book value per common share is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies.

Funding Sources

Our primary sources of funding are secured financings, unsecured long-term and short-term borrowings, and deposits. We seek to maintain broad and diversified funding sources globally across products, programs, markets, currencies and creditors to avoid funding concentrations.

We raise funding through a number of different products, including:

- Collateralized financings, such as repurchase agreements, securities loaned and other secured financings;
- Long-term unsecured debt (including structured notes) through syndicated U.S. registered offerings, U.S. registered and Rule 144A medium-term note programs, offshore medium-term note offerings and other debt offerings;
- Savings, demand and time deposits through internal and third-party broker-dealers, as well as from retail and institutional clients; and
- Short-term unsecured debt at the subsidiary level through U.S. and non-U.S. hybrid financial instruments and other methods.

Our funding is primarily raised in U.S. dollar, Euro, British pound and Japanese yen. We generally distribute our funding products through our own sales force and third-party distributors to a large, diverse creditor base in a variety of markets in the Americas, Europe and Asia. We believe that our relationships with our creditors are critical to our liquidity. Our creditors include banks, governments, securities lenders, corporations, pension funds, insurance companies, mutual funds and individuals. We have imposed various internal guidelines to monitor creditor concentration across our funding programs.

Secured Funding. We fund a significant amount of inventory on a secured basis, including repurchase agreements, securities loaned and other secured financings. As of March 2018 and December 2017, secured funding included in collateralized financings in the condensed consolidated statements of financial condition was $137.93 billion and $124.30 billion, respectively. We may also pledge our inventory as collateral for securities borrowed under a securities lending agreement or as collateral for derivative transactions. We also use our own inventory to cover transactions in which we or our clients have sold securities that have not yet been purchased. Secured funding is less sensitive to changes in our credit quality than unsecured funding, due to our posting of collateral to our lenders. Nonetheless, we continually analyze the refinancing risk of our secured funding activities, taking into account trade tenors, maturity profiles, counterparty concentrations, collateral eligibility and counterparty roll over probabilities. We seek to mitigate our refinancing risk by executing term trades with staggered maturities, diversifying counterparties, raising excess secured funding, and pre-funding residual risk through our GCLA.

We seek to raise secured funding with a term appropriate for the liquidity of the assets that are being financed, and we seek longer maturities for secured funding collateralized by asset classes that may be harder to fund on a secured basis, especially during times of market stress. Our secured funding, excluding funding collateralized by liquid government and agency obligations, is primarily executed for tenors of one month or greater and is primarily executed through term repurchase agreements and securities loaned contracts.

The weighted average maturity of our secured funding included in collateralized financings in the condensed consolidated statements of financial condition, excluding funding that can only be collateralized by liquid government and agency obligations, exceeded 120 days as of March 2018.

Assets that may be harder to fund on a secured basis during times of market stress include certain financial instruments in the following categories: mortgage and other asset-backed loans and securities, non-investment-grade corporate debt securities, equity securities and emerging market securities. Assets that are classified in level 3 of the fair value hierarchy are generally funded on an unsecured basis. See Notes 5 and 6 to the condensed consolidated financial statements for further information about the classification of financial instruments in the fair value hierarchy and "Unsecured Long-Term Borrowings" below for further information about the use of unsecured long-term borrowings as a source of funding.

We also raise financing through other types of collateralized financings, such as secured loans and notes. Goldman Sachs Bank USA (GS Bank USA) has access to funding from the Federal Home Loan Bank. As of March 2018 and December 2017, our outstanding borrowings against the Federal Home Loan Bank were $2.90 billion and $3.40 billion, respectively.

GS Bank USA also has access to funding through the Federal Reserve Bank discount window. While we do not rely on this funding in our liquidity planning and stress testing, we maintain policies and procedures necessary to access this funding and test discount window borrowing procedures.

Unsecured Long-Term Borrowings. We issue unsecured long-term borrowings as a source of funding for inventory and other assets and to finance a portion of our GCLA. We issue in different tenors, currencies and products to maximize the diversification of our investor base.

The table below presents our quarterly unsecured long-term borrowings maturity profile as of March 2018.

$ in millions	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2019	**$ –**	**$10,627**	**$3,882**	**$10,706**	**$ 25,215**
2020	**$6,107**	**$ 7,912**	**$5,992**	**$ 6,205**	**26,216**
2021	**$3,012**	**$ 3,597**	**$7,743**	**$ 7,583**	**21,935**
2022	**$6,042**	**$ 5,818**	**$5,458**	**$ 5,759**	**23,077**
2023	**$8,464**	**$ 3,566**	**$7,898**	**$ 3,354**	**23,282**
2024 - thereafter					**106,174**
Total					**$225,899**

The weighted average maturity of our unsecured long-term borrowings as of March 2018 was approximately eight years. To mitigate refinancing risk, we seek to limit the principal amount of debt maturing over the course of any monthly, quarterly or annual time horizon. We enter into interest rate swaps to convert a portion of our unsecured long-term borrowings into floating-rate obligations to manage our exposure to interest rates. See Note 16 to the condensed consolidated financial statements for further information about our unsecured long-term borrowings.

Deposits. Our deposits provide us with a diversified source of funding and reduce our reliance on wholesale funding. A growing source of our deposit base consists of retail deposits. Deposits are primarily used to finance lending activity, other inventory and a portion of our GCLA. We raise deposits primarily through GS Bank USA and Goldman Sachs International Bank (GSIB). As of March 2018 and December 2017, our deposits were $150.94 billion and $138.60 billion, respectively. See Note 14 to the condensed consolidated financial statements for further information about our deposits.

Unsecured Short-Term Borrowings. A significant portion of our unsecured short-term borrowings was originally long-term debt that is scheduled to mature within one year of the reporting date. We use unsecured short-term borrowings, including hybrid financial instruments, to finance liquid assets and for other cash management purposes. In light of regulatory developments, Group Inc. no longer issues debt with an original maturity of less than one year, other than to its subsidiaries.

As of March 2018 and December 2017, our unsecured short-term borrowings, including the current portion of unsecured long-term borrowings, were $47.76 billion and $46.92 billion, respectively. See Note 15 to the condensed consolidated financial statements for further information about our unsecured short-term borrowings.

Equity Capital Management and Regulatory Capital

Capital adequacy is of critical importance to us. We have in place a comprehensive capital management policy that provides a framework, defines objectives and establishes guidelines to assist us in maintaining the appropriate level and composition of capital in both business-as-usual and stressed conditions.

Equity Capital Management

We determine the appropriate amount and composition of our equity capital by considering multiple factors including our current and future regulatory capital requirements, the results of our capital planning and stress testing process, the results of resolution capital models and other factors, such as rating agency guidelines, subsidiary capital requirements, the business environment and conditions in the financial markets.

We manage our capital requirements and the levels of our capital usage principally by setting limits on balance sheet assets and/or limits on risk, in each case at both the firmwide and business levels.

We principally manage the level and composition of our equity capital through issuances and repurchases of our common stock. We may also, from time to time, issue or repurchase our preferred stock, junior subordinated debt issued to trusts, and other subordinated debt or other forms of capital as business conditions warrant. Prior to any repurchases, we must receive confirmation that the Board of Governors of the Federal Reserve System (Federal Reserve Board or FRB) does not object to such capital action. See Notes 16 and 19 to the condensed consolidated financial statements for further information about our preferred stock, junior subordinated debt issued to trusts and other subordinated debt.

Capital Planning and Stress Testing Process. As part of capital planning, we project sources and uses of capital given a range of business environments, including stressed conditions. Our stress testing process is designed to identify and measure material risks associated with our business activities including market risk, credit risk and operational risk, as well as our ability to generate revenues.

The following is a description of our capital planning and stress testing process:

Capital Planning. Our capital planning process incorporates an internal capital adequacy assessment with the objective of ensuring that we are appropriately capitalized relative to the risks in our businesses. We incorporate stress scenarios into our capital planning process with a goal of holding sufficient capital to ensure we remain adequately capitalized after experiencing a severe stress event. Our assessment of capital adequacy is viewed in tandem with our assessment of liquidity adequacy and is integrated into our overall risk management structure, governance and policy framework.

Our capital planning process also includes an internal risk-based capital assessment. This assessment incorporates market risk, credit risk and operational risk. Market risk is calculated by using Value-at-Risk (VaR) calculations supplemented by risk-based add-ons which include risks related to rare events (tail risks). Credit risk utilizes assumptions about our counterparties' probability of default and the size of our losses in the event of a default. Operational risk is calculated based on scenarios incorporating multiple types of operational failures, as well as considering internal and external actual loss experience. Backtesting for market risk and credit risk is used to gauge the effectiveness of models at capturing and measuring relevant risks.

Stress Testing. Our stress tests incorporate our internally designed stress scenarios, including our internally developed severely adverse scenario, and those required under CCAR and DFAST, and are designed to capture our specific vulnerabilities and risks. We provide further information about our stress test processes and a summary of the results on our website as described in "Available Information" below.

As required by the FRB's annual CCAR rules, we submit a capital plan for review by the FRB. The purpose of the FRB's review is to ensure that we have a robust, forward-looking capital planning process that accounts for our unique risks and that permits continued operation during times of economic and financial stress.

The FRB evaluates us based, in part, on whether we have the capital necessary to continue operating under the baseline and stress scenarios provided by the FRB and those developed internally. This evaluation also takes into account our process for identifying risk, our controls and governance for capital planning, and our guidelines for making capital planning decisions. In addition, the FRB evaluates our plan to make capital distributions (i.e., dividend payments and repurchases or redemptions of stock, subordinated debt or other capital securities) and issue capital, across a range of macroeconomic scenarios and firm-specific assumptions.

In addition, the DFAST rules require us to conduct stress tests on a semi-annual basis and publish a summary of certain results. The FRB also conducts its own annual stress tests and publishes a summary of certain results.

With respect to our 2017 CCAR submission, the FRB informed us that it did not object to our capital actions. On April 16, 2018, the Board of Directors of Group Inc. (Board) increased our quarterly dividend by $0.05 to $0.80 per common share. Primarily as a result of the impact of Tax Legislation on our capital position, we do not expect to execute share repurchases in the second quarter of 2018. Subject to non-objection to our capital plan by the FRB and future capital deployment opportunities, we plan to resume repurchases in the third quarter and we currently expect our repurchases of shares of our common stock to be approximately $5 billion to $6 billion per annual CCAR cycle. We published a summary of our annual DFAST results in June 2017. See "Available Information" below. We submitted our 2018 CCAR results in April 2018 and expect to publish a summary of our annual DFAST results in June 2018.

In addition, the rules adopted by the FRB under the Dodd-Frank Act require GS Bank USA to conduct stress tests on an annual basis and publish a summary of certain results. GS Bank USA submitted its 2017 annual DFAST results to the FRB in April 2017 and published a summary of its annual DFAST results in June 2017. See "Available Information" below. GS Bank USA submitted its 2018 annual DFAST results to the FRB in April 2018 and expects to publish a summary of its annual DFAST results in June 2018.

Goldman Sachs International (GSI) and GSIB also have their own capital planning and stress testing process, which incorporates internally designed stress tests and those required under the Prudential Regulation Authority's (PRA) Internal Capital Adequacy Assessment Process.

Contingency Capital Plan. As part of our comprehensive capital management policy, we maintain a contingency capital plan. Our contingency capital plan provides a framework for analyzing and responding to a perceived or actual capital deficiency, including, but not limited to, identification of drivers of a capital deficiency, as well as mitigants and potential actions. It outlines the appropriate communication procedures to follow during a crisis period, including internal dissemination of information, as well as timely communication with external stakeholders.

Capital Attribution. We assess each of our businesses' capital usage based upon our internal assessment of risks, which incorporates an attribution of all of our relevant regulatory capital requirements. These regulatory capital requirements are allocated using our attributed equity framework, which takes into consideration our binding capital constraints. We also attribute risk-weighted assets (RWAs) to our business segments. As of March 2018, approximately 60% and 55% of RWAs calculated in accordance with the Standardized Capital Rules and the Basel III Advanced Rules, respectively, were attributed to our Institutional Client Services segment and substantially all of the remaining RWAs were attributed to our Investing & Lending segment. We manage the levels of our capital usage based upon balance sheet and risk limits, as well as capital return analyses of our businesses based on our capital attribution.

Share Repurchase Program. We use our share repurchase program to help maintain the appropriate level of common equity. The repurchase program is effected primarily through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), the amounts and timing of which are determined primarily by our current and projected capital position and our capital plan submitted to the FRB as part of CCAR. The amounts and timing of the repurchases may also be influenced by general market conditions and the prevailing price and trading volumes of our common stock.

As of March 2018, the remaining share authorization under our existing repurchase program was 44.6 million shares; however, we are only permitted to make repurchases to the extent that such repurchases have not been objected to by the FRB. See "Unregistered Sales of Equity Securities and Use of Proceeds" in Part II, Item 2 of this Form 10-Q and Note 19 to the condensed consolidated financial statements for further information about our share repurchase program, and see above for information about our capital planning and stress testing process.

Resolution Capital Models. In connection with our resolution planning efforts, we have established a Resolution Capital Adequacy and Positioning framework, which is designed to ensure that our major subsidiaries (GS Bank USA, Goldman Sachs & Co. LLC (GS&Co.), GSI, GSIB, Goldman Sachs Japan Co., Ltd. (GSJCL), Goldman Sachs Asset Management, L.P. and Goldman Sachs Asset Management International) have access to sufficient loss-absorbing capacity (in the form of equity, subordinated debt and unsecured senior debt) so that they are able to wind-down following a Group Inc. bankruptcy filing in accordance with our preferred resolution strategy.

In addition, we have established a triggers and alerts framework, which is designed to provide the Board with information needed to make an informed decision on whether and when to commence bankruptcy proceedings for Group Inc.

Rating Agency Guidelines

The credit rating agencies assign credit ratings to the obligations of Group Inc., which directly issues or guarantees substantially all of our senior unsecured debt obligations. GS&Co. and GSI have been assigned long- and short-term issuer ratings by certain credit rating agencies. GS Bank USA and GSIB have also been assigned long- and short-term issuer ratings, as well as ratings on their long-term and short-term bank deposits. In addition, credit rating agencies have assigned ratings to debt obligations of certain other subsidiaries of Group Inc.

The level and composition of our equity capital are among the many factors considered in determining our credit ratings. Each agency has its own definition of eligible capital and methodology for evaluating capital adequacy, and assessments are generally based on a combination of factors rather than a single calculation. See "Risk Management — Liquidity Risk Management — Credit Ratings" for further information about credit ratings of Group Inc., GS Bank USA, GSIB, GS&Co. and GSI.

Consolidated Regulatory Capital

We are subject to consolidated regulatory capital requirements which are calculated in accordance with the regulations of the FRB (Capital Framework). Under the Capital Framework, we are an "Advanced approach" banking organization and have been designated as a global systemically important bank (G-SIB).

The Capital Framework includes risk-based capital buffers that will phase in ratably, becoming fully effective on January 1, 2019. The minimum risk-based capital ratios applicable to us as of January 2019 will reflect the fully phased-in capital conservation buffer (2.5%), the countercyclical capital buffer, if any, determined by the FRB and the fully phased-in G-SIB buffer (2.5%). Based on financial data for the three months ended March 2018, our current estimate is that we are above the threshold for the 3.0% G-SIB buffer. The earliest this buffer could be effective is January 2021. The G-SIB and countercyclical buffers in the future may differ due to additional guidance from our regulators and/or positional changes.

See "Regulatory Matters and Developments — Regulatory Developments" below for information about the FRB's proposed rule related to the capital conservation buffer. In addition, see Note 20 to the condensed consolidated financial statements for further information about our risk-based capital ratios and leverage ratios as of both March 2018 and December 2017, and for further information about the Capital Framework.

Subsidiary Capital Requirements

Many of our subsidiaries, including our bank and broker-dealer subsidiaries, are subject to separate regulation and capital requirements of the jurisdictions in which they operate.

Bank Subsidiaries. GS Bank USA is our primary U.S. banking subsidiary and GSIB is our primary non-U.S. banking subsidiary. These entities are subject to regulatory capital requirements.

See Note 20 to the condensed consolidated financial statements for further information about the regulatory capital requirements of our bank subsidiaries.

U.S. Regulated Broker-Dealer Subsidiaries. GS&Co. is our primary U.S. regulated broker-dealer subsidiary and is subject to regulatory capital requirements including those imposed by the SEC and the Financial Industry Regulatory Authority, Inc. In addition, GS&Co. is a registered futures commission merchant and is subject to regulatory capital requirements imposed by the CFTC, the Chicago Mercantile Exchange and the National Futures Association. Rule 15c3-1 of the SEC and Rule 1.17 of the CFTC specify uniform minimum net capital requirements, as defined, for their registrants, and also effectively require that a significant part of the registrants' assets be kept in relatively liquid form. GS&Co. has elected to calculate its minimum capital requirements in accordance with the "Alternative Net Capital Requirement" as permitted by Rule 15c3-1.

As of March 2018 and December 2017, GS&Co. had regulatory net capital, as defined by Rule 15c3-1, of $16.27 billion and $15.57 billion, respectively, which exceeded the amount required by $13.85 billion and $13.15 billion, respectively. In addition to its alternative minimum net capital requirements, GS&Co. is also required to hold tentative net capital in excess of $1 billion and net capital in excess of $500 million in accordance with the market and credit risk standards of Appendix E of Rule 15c3-1. GS&Co. is also required to notify the SEC in the event that its tentative net capital is less than $5 billion. As of both March 2018 and December 2017, GS&Co. had tentative net capital and net capital in excess of both the minimum and the notification requirements.

Non-U.S. Regulated Broker-Dealer Subsidiaries. Our principal non-U.S. regulated broker-dealer subsidiaries include GSI and GSJCL.

GSI, our U.K. broker-dealer, is regulated by the PRA and the Financial Conduct Authority. GSI is subject to the capital framework for E.U.-regulated financial institutions prescribed in the E.U. Fourth Capital Requirements Directive (CRD IV) and the E.U. Capital Requirements Regulation (CRR). These capital regulations are largely based on Basel III.

The table below presents GSI's minimum required risk-based capital ratios.

	March 2018 Minimum Ratio	December 2017 Minimum Ratio
CET1 ratio	**7.792%**	7.165%
Tier 1 capital ratio	**9.768%**	9.143%
Total capital ratio	**12.394%**	11.771%

In the table above, the minimum risk-based capital ratios incorporate capital guidance received from the PRA and could change in the future. GSI's future capital requirements may also be impacted by developments such as the introduction of risk-based capital buffers.

The table below presents GSI's risk-based capital ratios.

	As of	
$ in millions	March 2018	December 2017
Common Equity Tier 1	**$ 25,274**	$ 24,871
Tier 1 capital	**31,070**	30,671
Tier 2 capital	**5,377**	5,377
Total capital	**$ 36,447**	$ 36,048
RWAs	**$233,485**	$225,942
CET1 ratio	**10.8%**	11.0%
Tier 1 capital ratio	**13.3%**	13.6%
Total capital ratio	**15.6%**	16.0%

In the table above, CET1, Tier 1 capital and Total capital as of March 2018 included amounts which will be finalized upon the issuance of GSI's 2018 annual audited financial statements and contributed approximately 17 basis points to the risk-based capital ratios.

In November 2016, the European Commission proposed amendments to the CRR to implement a 3% minimum leverage ratio requirement for certain E.U. financial institutions. This leverage ratio compares the CRR's definition of Tier 1 capital to a measure of leverage exposure, defined as the sum of certain assets plus certain off-balance-sheet exposures (which include a measure of derivatives, securities financing transactions, commitments and guarantees), less Tier 1 capital deductions. Any required minimum leverage ratio is expected to become effective for GSI no earlier than January 1, 2021. As of March 2018 and December 2017, GSI had a leverage ratio of 3.7% and 4.1%, respectively. Tier 1 capital as of March 2018 included amounts which will be finalized upon the issuance of GSI's 2018 annual audited financial statements and these amounts contributed approximately 5 basis points to the leverage ratio. This leverage ratio is based on our current interpretation and understanding of this rule and may evolve as we discuss the interpretation and application of this rule with GSI's regulators.

GSJCL, our Japanese broker-dealer, is regulated by Japan's Financial Services Agency. GSJCL and certain other non-U.S. subsidiaries are also subject to capital adequacy requirements promulgated by authorities of the countries in which they operate. As of both March 2018 and December 2017, these subsidiaries were in compliance with their local capital adequacy requirements.

Other Subsidiaries. The capital requirements of several of our subsidiaries may increase in the future due to the various developments arising from the Basel Committee, the Dodd-Frank Act, and other governmental entities and regulators. See Note 20 to the condensed consolidated financial statements for information about the capital requirements of our other regulated subsidiaries.

Subsidiaries not subject to separate regulatory capital requirements may hold capital to satisfy local tax and legal guidelines, rating agency requirements (for entities with assigned credit ratings) or internal policies, including policies concerning the minimum amount of capital a subsidiary should hold based on its underlying level of risk. In certain instances, Group Inc. may be limited in its ability to access capital held at certain subsidiaries as a result of regulatory, tax or other constraints.

As of March 2018 and December 2017, Group Inc.'s equity investment in subsidiaries was $94.41 billion and $93.88 billion, respectively, compared with its total shareholders' equity of $83.58 billion and $82.24 billion, respectively.

Our capital invested in non-U.S. subsidiaries is generally exposed to foreign exchange risk, substantially all of which is managed through a combination of derivatives and non-U.S. denominated debt. See Note 7 to the condensed consolidated financial statements for information about our net investment hedges, which are used to hedge this risk.

Regulatory Matters and Developments

Our businesses are subject to significant and evolving regulation. The Dodd-Frank Act, enacted in July 2010, significantly altered the financial regulatory regime within which we operate. In addition, other reforms have been adopted or are being considered by regulators and policy makers worldwide. Given that many of the new and proposed rules are highly complex, the full impact of regulatory reform will not be known until the rules are implemented and market practices develop under the final regulations.

See "Business — Regulation" in Part I, Item 1 of the 2017 Form 10-K for further information about the laws, rules and regulations and proposed laws, rules and regulations that apply to us and our operations.

Resolution and Recovery Plans

We are required by the FRB and the FDIC to submit a periodic plan that describes our strategy for a rapid and orderly resolution in the event of material financial distress or failure (resolution plan). We are also required by the FRB to submit a periodic recovery plan that outlines the steps that management could take to reduce risk, maintain sufficient liquidity, and conserve capital in times of prolonged stress.

In December 2017, the FRB and the FDIC provided feedback on our 2017 resolution plan and determined that it satisfactorily addressed the shortcomings identified in our prior submissions. The FRB and the FDIC did not identify deficiencies in our 2017 resolution plan, but the FRB and the FDIC did note one shortcoming that must be addressed in our next resolution plan submission. Our next resolution plan is due on July 1, 2019. See "Available Information" below.

In addition, GS Bank USA is required to submit periodic resolution plans to the FDIC. GS Bank USA's next resolution plan is due on July 1, 2018.

Regulatory Developments

In April 2018, the FRB issued a proposed rule to establish stress buffer requirements. Under the proposal, a stress capital buffer (SCB) would replace the 2.5% component of the capital conservation buffer. The SCB, subject to a minimum of 2.5%, would reflect stressed losses in the supervisory severely adverse scenario of the FRB's CCAR stress tests and would also include four quarters of planned common stock dividends. The proposal would also introduce a stress leverage buffer (SLB) requirement, similar to the SCB, which would apply to the Tier 1 leverage ratio.

Under the proposal, the SCB and SLB requirements would become effective on October 1, 2019.

In addition, in April 2018, the FRB issued a proposed rule which would replace the current 2% SLR buffer for G-SIBs, including Group Inc., with a buffer equal to 50% of their G-SIB buffer. This proposal would also make conforming modifications to the minimum total loss-absorbing capacity (TLAC) and eligible long-term debt requirements applicable to G-SIBs.

We are currently evaluating the impact of these proposed rules.

Off-Balance-Sheet Arrangements and Contractual Obligations

Off-Balance-Sheet Arrangements

We have various types of off-balance-sheet arrangements that we enter into in the ordinary course of business. Our involvement in these arrangements can take many different forms, including:

- Purchasing or retaining residual and other interests in special purpose entities such as mortgage-backed and other asset-backed securitization vehicles;
- Holding senior and subordinated debt, interests in limited and general partnerships, and preferred and common stock in other nonconsolidated vehicles;
- Entering into interest rate, foreign currency, equity, commodity and credit derivatives, including total return swaps;
- Entering into operating leases; and
- Providing guarantees, indemnifications, commitments, letters of credit and representations and warranties.

We enter into these arrangements for a variety of business purposes, including securitizations. The securitization vehicles that purchase mortgages, corporate bonds, and other types of financial assets are critical to the functioning of several significant investor markets, including the mortgage-backed and other asset-backed securities markets, since they offer investors access to specific cash flows and risks created through the securitization process.

We also enter into these arrangements to underwrite client securitization transactions; provide secondary market liquidity; make investments in performing and nonperforming debt, distressed loans, power-related assets, equity securities, real estate and other assets; provide investors with credit-linked and asset-repackaged notes; and receive or provide letters of credit to satisfy margin requirements and to facilitate the clearance and settlement process.

Our financial interests in, and derivative transactions with, such nonconsolidated entities are generally accounted for at fair value, in the same manner as our other financial instruments, except in cases where we apply the equity method of accounting.

The table below presents where information about our various off-balance-sheet arrangements may be found in this Form 10-Q. In addition, see Note 3 to the condensed consolidated financial statements for information about our consolidation policies.

Type of Off-Balance-Sheet Arrangement	Disclosure in Form 10-Q
Variable interests and other obligations, including contingent obligations, arising from variable interests in nonconsolidated variable interest entities (VIEs)	See Note 12 to the condensed consolidated financial statements.
Leases	See "Contractual Obligations" below and Note 18 to the condensed consolidated financial statements.
Guarantees, letters of credit, and lending and other commitments	See Note 18 to the condensed consolidated financial statements.
Derivatives	See "Risk Management — Credit Risk Management — Credit Exposures — OTC Derivatives" below and Notes 4, 5, 7 and 18 to the condensed consolidated financial statements.

Contractual Obligations

We have certain contractual obligations which require us to make future cash payments. These contractual obligations include our time deposits, secured long-term financings, unsecured long-term borrowings, contractual interest payments, subordinated liabilities of consolidated VIEs and minimum rental payments under noncancelable leases.

Our obligations to make future cash payments also include our commitments and guarantees related to off-balance-sheet arrangements, which are excluded from the table below. See Note 18 to the condensed consolidated financial statements for further information about such commitments and guarantees.

Due to the uncertainty of the timing and amounts that will ultimately be paid, our liability for unrecognized tax benefits has been excluded from the table below. See Note 24 to the condensed consolidated financial statements for further information about our unrecognized tax benefits.

The table below presents our contractual obligations by type.

	As of	
$ in millions	**March 2018**	December 2017
Time deposits	**$ 29,959**	$ 30,075
Secured long-term financings	**$ 10,774**	$ 9,892
Unsecured long-term borrowings	**$225,899**	$217,687
Contractual interest payments	**$ 55,470**	$ 54,489
Subordinated liabilities of consolidated VIEs	**$ 15**	$ 19
Minimum rental payments	**$ 2,308**	$ 1,964

The table below presents our contractual obligations by period of expiration.

	As of March 2018			
$ in millions	**Remainder of 2018**	**2019 - 2020**	**2021 - 2022**	**2023 - Thereafter**
Time deposits	**$ –**	**$14,665**	**$ 8,856**	**$ 6,438**
Secured long-term financings	**$ –**	**$ 5,371**	**$ 3,008**	**$ 2,395**
Unsecured long-term borrowings	**$ –**	**$51,431**	**$45,012**	**$129,456**
Contractual interest payments	**$4,878**	**$12,137**	**$ 9,171**	**$ 29,284**
Subordinated liabilities of consolidated VIEs	**$ –**	**$ –**	**$ –**	**$ 15**
Minimum rental payments	**$ 234**	**$ 588**	**$ 395**	**$ 1,091**

In the table above:

- Obligations maturing within one year of our financial statement date or redeemable within one year of our financial statement date at the option of the holders are excluded as they are treated as short-term obligations. See Note 15 to the condensed consolidated financial statements for further information about our short-term borrowings.
- Obligations that are repayable prior to maturity at our option are reflected at their contractual maturity dates and obligations that are redeemable prior to maturity at the option of the holders are reflected at the earliest dates such options become exercisable.
- As of March 2018, unsecured long-term borrowings had maturities extending to 2067, consisted principally of senior borrowings, and included $4.65 billion of adjustments to the carrying value of certain unsecured long-term borrowings resulting from the application of hedge accounting. See Note 16 to the condensed consolidated financial statements for further information about our unsecured long-term borrowings.
- As of March 2018, the difference between the aggregate contractual principal amount and the related fair value of long-term other secured financings for which the fair value option was elected was not material.
- As of March 2018, the aggregate contractual principal amount of unsecured long-term borrowings for which the fair value option was elected exceeded the related fair value by $2.03 billion.
- Contractual interest payments represents estimated future interest payments related to unsecured long-term borrowings, secured long-term financings and time deposits based on applicable interest rates as of March 2018, and includes stated coupons, if any, on structured notes.
- Future minimum rental payments are net of minimum sublease rentals under noncancelable leases. These lease commitments for office space expire on various dates through 2069. Certain agreements are subject to periodic escalation provisions for increases in real estate taxes and other charges. See Note 18 to the condensed consolidated financial statements for further information about our leases.

Risk Management

Risks are inherent in our businesses and include liquidity, market, credit, operational, model, legal, compliance, conduct, regulatory and reputational risks. For further information about our risk management processes, see "Overview and Structure of Risk Management" below. Our risks include the risks across our risk categories, regions or global businesses, as well as those which have uncertain outcomes and have the potential to materially impact our financial results, our liquidity and our reputation. For further information about our areas of risk, see "Liquidity Risk Management," "Market Risk Management," "Credit Risk Management," "Operational Risk Management" and "Model Risk Management" below and "Risk Factors" in Part I, Item 1A of the 2017 Form 10-K.

Overview and Structure of Risk Management

Overview

We believe that effective risk management is of primary importance to our success. Accordingly, we have established an Enterprise Risk Management (ERM) framework that employs a comprehensive, integrated approach to risk management, and is designed to enable comprehensive risk management processes through which we identify, assess, monitor and manage the risks we assume in conducting our activities. These risks include liquidity, market, credit, operational, model, legal, compliance, conduct, regulatory and reputational risk exposures. Our risk management structure is built around three core components: governance, processes and people.

Governance. Risk management governance starts with the Board, which both directly and through its committees, including its Risk Committee, oversees our risk management policies and practices implemented through the ERM framework. The Board is also responsible for the annual review and approval of our risk appetite statement. The risk appetite statement describes the levels and types of risk we are willing to accept or to avoid, in order to achieve our strategic business objectives, while remaining in compliance with regulatory requirements.

The Board receives regular briefings on firmwide risks, including liquidity risk, market risk, credit risk, operational risk and model risk from our independent control and support functions, including the chief risk officer, and on compliance risk and conduct risk from the head of Compliance, on legal and regulatory matters from the general counsel, and on other matters impacting our reputation from the chair of our Firmwide Client and Business Standards Committee. The chief risk officer, as part of the review of the firmwide risk portfolio, regularly advises the Risk Committee of the Board of relevant risk metrics and material exposures, including risk limits and thresholds established in our risk appetite statement.

Next, at our most senior levels, our leaders are experienced risk managers, with a sophisticated and detailed understanding of the risks we take. Our senior management, and senior managers in our revenue-producing units and independent control and support functions, lead and participate in risk-oriented committees. Independent control and support functions include Compliance, the Conflicts Resolution Group (Conflicts), Controllers, Credit Risk Management, Human Capital Management, Legal, Liquidity Risk Management and Analysis (Liquidity Risk Management), Market Risk Management and Analysis (Market Risk Management), Model Risk Management, Operations, Operational Risk Management and Analysis (Operational Risk Management), Tax, Technology and Treasury.

Our governance structure provides the protocol and responsibility for decision-making on risk management issues and ensures implementation of those decisions. We make extensive use of risk-related committees that meet regularly and serve as an important means to facilitate and foster ongoing discussions to identify, manage and mitigate risks.

We maintain strong communication about risk and we have a culture of collaboration in decision-making among the revenue-producing units, independent control and support functions, committees and senior management. While our revenue-producing units are responsible for management of their risk, we dedicate extensive resources to independent control and support functions in order to ensure a strong oversight structure and an appropriate segregation of duties. We regularly reinforce our strong culture of escalation and accountability across all functions.

Processes. We maintain various processes and procedures that are critical components of our risk management framework, including identifying, assessing, monitoring and limiting our risks.

To effectively assess and monitor our risks, we maintain a daily discipline of marking substantially all of our inventory to current market levels. We carry our inventory at fair value, with changes in valuation reflected immediately in our risk management systems and in net revenues. We do so because we believe this discipline is one of the most effective tools for assessing and managing risk and that it provides transparent and realistic insight into our inventory exposures.

We also apply a rigorous framework of limits and thresholds to control and monitor risk across transactions, products, businesses and markets. The Board, directly or indirectly through its Risk Committee, approves limits and thresholds included in our risk appetite statement, at firmwide, business and product levels. In addition, the Firmwide Risk Committee is responsible for approving our risk limits framework, subject to the overall limits approved by the Risk Committee of the Board, at a variety of levels and monitoring these limits on a daily basis. The Risk Governance Committee (through delegated authority from the Firmwide Risk Committee) is responsible for approving limits at firmwide, business and product levels. Certain limits may be set at levels that will require periodic adjustment, rather than at levels which reflect our maximum risk appetite. This fosters an ongoing dialogue on risk among revenue-producing units, independent control and support functions, committees and senior management, as well as rapid escalation of risk-related matters. See "Liquidity Risk Management," "Market Risk Management" and "Credit Risk Management" for further information about our risk limits.

Active management of our positions is another important process. Proactive mitigation of our market and credit exposures minimizes the risk that we will be required to take outsized actions during periods of stress.

Effective risk reporting and risk decision-making depends on our ability to get the right information to the right people at the right time. As such, we focus on the rigor and effectiveness of our risk systems, with the objective of ensuring that our risk management technology systems are comprehensive, reliable and timely. We devote significant time and resources to our risk management technology to ensure that it consistently provides us with complete, accurate and timely information.

People. Even the best technology serves only as a tool for helping to make informed decisions in real time about the risks we are taking. Ultimately, effective risk management requires our people to interpret our risk data on an ongoing and timely basis and adjust risk positions accordingly. In both our revenue-producing units and our independent control and support functions, the experience of our professionals, and their understanding of the nuances and limitations of each risk measure, guide us in assessing exposures and maintaining them within prudent levels.

We reinforce a culture of effective risk management, consistent with our risk appetite statement, in our training and development programs, as well as the way we evaluate performance, and recognize and reward our people. Our training and development programs, including certain sessions led by our most senior leaders, are focused on the importance of risk management, client relationships and reputational excellence. As part of our annual performance review process, we assess reputational excellence including how an employee exercises good risk management and reputational judgment, and adheres to our code of conduct and compliance policies. Our review and reward processes are designed to communicate and reinforce to our professionals the link between behavior and how people are recognized, the need to focus on our clients and our reputation, and the need to always act in accordance with our highest standards.

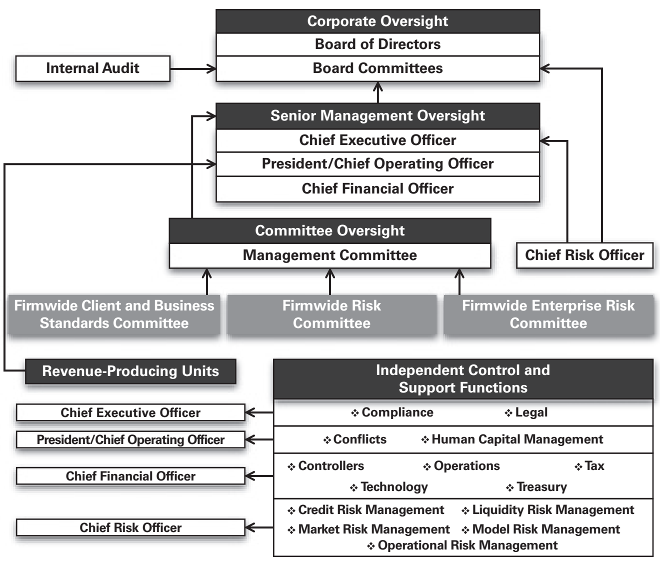
Structure

Ultimate oversight of risk is the responsibility of our Board. The Board oversees risk both directly and through its committees, including its Risk Committee. We have a series of committees with specific risk management mandates that have oversight or decision-making responsibilities for risk management activities. Committee membership generally consists of senior managers from both our revenue-producing units and our independent control and support functions. We have established procedures for these committees to ensure that appropriate information barriers are in place. Our primary risk committees, most of which also have additional sub-committees or working groups, are described below. In addition to these committees, we have other risk-oriented committees which provide oversight for different businesses, activities, products, regions and entities. All of our committees have responsibility for considering the impact of transactions and activities, which they oversee, on our reputation.

Membership of our risk committees is reviewed regularly and updated to reflect changes in the responsibilities of the committee members. Accordingly, the length of time that members serve on the respective committees varies as determined by the committee chairs and based on the responsibilities of the members.

In addition, independent control and support functions, which report to the chief executive officer, the president and chief operating officer, the chief financial officer or the chief risk officer, are responsible for day-to-day oversight or monitoring of risk, as illustrated in the chart below and as described in greater detail in the following sections. Internal Audit, which reports to the Audit Committee of the Board and includes professionals with a broad range of audit and industry experience, including risk management expertise, is responsible for independently assessing and validating key controls within the risk management framework.

The chart below presents an overview of our risk management governance structure, including the reporting relationships of our independent control and support functions.



Management Committee. The Management Committee oversees our global activities, including all of our independent control and support functions. It provides this oversight directly and through authority delegated to committees it has established. This committee consists of our most senior leaders, and is chaired by our chief executive officer. Most members of the Management Committee are also members of other committees. The following are the committees that are principally involved in firmwide risk management.

Firmwide Client and Business Standards Committee. The Firmwide Client and Business Standards Committee assesses and makes determinations regarding business standards and practices, reputational risk management, client relationships and client service, is chaired by our president and chief operating officer, who is appointed as chair by the chief executive officer, and reports to the Management Committee. This committee periodically updates and receives guidance from the Public Responsibilities Committee of the Board. This committee has also established certain committees that report to it, including divisional Client and Business Standards Committees and risk-related committees. The following are the risk-related committees that report to the Firmwide Client and Business Standards Committee:

- **Firmwide Reputational Risk Committee.** The Firmwide Reputational Risk Committee is responsible for assessing reputational risks arising from transactions that have been identified as requiring mandatory escalation to the Firmwide Reputational Risk Committee or that otherwise have potential heightened reputational risk. This committee is chaired by the chair of the Firmwide Client and Business Standards Committee, and the vice-chairs are the head of Compliance and the head of the Conflicts Resolution Group, who are appointed as vice-chairs by the chair of the Firmwide Client and Business Standards Committee.
- **Firmwide Suitability Committee.** The Firmwide Suitability Committee is responsible for setting standards and policies for product, transaction and client suitability and providing a forum for consistency across functions, regions and products on suitability assessments. This committee also reviews suitability matters escalated from other committees. This committee is co-chaired by the deputy head of Compliance, and the co-chief operating officer of Fixed Income, Currency and Commodities, who are appointed as co-chairs by the chair of the Firmwide Client and Business Standards Committee.

Firmwide Risk Committee. The Firmwide Risk Committee is globally responsible for the ongoing monitoring and management of our financial risks. The Firmwide Risk Committee approves our financial risk limits framework, metrics and methodologies, and reviews results of stress tests and scenario analyses. This committee is co-chaired by our chief financial officer and our chief risk officer, who are appointed as co-chairs by the chief executive officer, and reports to the Management Committee. The following are the primary committees that report to the Firmwide Risk Committee:

- **Firmwide Finance Committee.** The Firmwide Finance Committee has oversight responsibility for liquidity risk, the size and composition of our balance sheet, capital base and other financial resources, as well as credit ratings. This committee regularly reviews our liquidity, balance sheet, funding position, capitalization and other financial resources, approves related policies, and makes recommendations as to any adjustments to be made in light of current events, risks, exposures and regulatory requirements. As a part of such oversight, among other things, this committee reviews and approves balance sheet limits and the size of our GCLA. This committee is co-chaired by our chief risk officer and our global treasurer, who are appointed as co-chairs by the Firmwide Risk Committee.

- **Firmwide Investment Policy Committee.** The Firmwide Investment Policy Committee reviews, approves, sets policies, and provides oversight for certain illiquid principal investments, including review of risk management and controls for these types of investments. This committee is co-chaired by the head of our Merchant Banking Division, a co-head of our Securities Division and a deputy general counsel, who are appointed as co-chairs by our president and chief operating officer and our chief financial officer.

- **Firmwide Volcker Oversight Committee.** The Firmwide Volcker Oversight Committee is responsible for the oversight and periodic review of the implementation of our Volcker Rule compliance program, as approved by the Board, and other Volcker Rule-related matters. This committee is co-chaired by a deputy chief risk officer and the deputy head of Compliance, who are appointed as co-chairs by the co-chairs of the Firmwide Risk Committee.

- **Risk Governance Committee.** The Risk Governance Committee (through delegated authority from the Firmwide Risk Committee) is globally responsible for the ongoing approval and monitoring of risk frameworks, policies, parameters and limits, at firmwide, business and product levels. This committee is chaired by our chief risk officer, who is appointed as chair by the co-chairs of the Firmwide Risk Committee.

The following committees report jointly to the Firmwide Risk Committee and the Firmwide Client and Business Standards Committee:

- **Firmwide Capital Committee.** The Firmwide Capital Committee provides approval and oversight of debt-related transactions, including principal commitments of our capital. This committee aims to ensure that business, reputational and suitability standards for underwritings and capital commitments are maintained on a global basis. This committee is co-chaired by the head of Credit Risk Management and the head of the Europe, Middle East and Africa Financing Group. The co-chairs of the Firmwide Capital Committee are appointed by the co-chairs of the Firmwide Risk Committee.

- **Firmwide Commitments Committee.** The Firmwide Commitments Committee reviews our underwriting and distribution activities with respect to equity and equity-related product offerings, and sets and maintains policies and procedures designed to ensure that legal, reputational, regulatory and business standards are maintained on a global basis. In addition to reviewing specific transactions, this committee periodically conducts general strategic reviews of sectors and products and establishes policies in connection with transaction practices. This committee is co-chaired by the co-head of the Industrials group in our Investment Banking Division, our chief underwriting officer, and a managing director in Risk Management, who are appointed as co-chairs by the chair of the Firmwide Client and Business Standards Committee.

Firmwide Enterprise Risk Committee. The Firmwide Enterprise Risk Committee is responsible for the ongoing review, approval and monitoring of the ERM framework and for providing oversight of our aggregate financial and nonfinancial risks. This committee is co-chaired by our president and chief operating officer and our chief risk officer, who are appointed as co-chairs by our chief executive officer, and reports to the Management Committee. The following are the primary committees that report to the Firmwide Enterprise Risk Committee:

- **Firmwide New Activity Committee.** The Firmwide New Activity Committee is responsible for reviewing new activities and for establishing a process to identify and review previously approved activities that are significant and that have changed in complexity and/or structure or present different reputational and suitability concerns over time to consider whether these activities remain appropriate. This committee is co-chaired by the head of regulatory controllers and the co-head of Europe, Middle East and Africa FICC sales, who are appointed as co-chairs by the chairs of the Firmwide Enterprise Risk Committee.

- **Firmwide Model Risk Control Committee.** The Firmwide Model Risk Control Committee is responsible for oversight of the development and implementation of model risk controls, which includes governance, policies and procedures related to our reliance on financial models. This committee is chaired by a deputy chief risk officer, who is appointed as chair by the chairs of the Firmwide Enterprise Risk Committee.
- **Firmwide Conduct and Operational Risk Committee.** The Firmwide Conduct and Operational Risk Committee is globally responsible for the ongoing approval and monitoring of the frameworks, policies, parameters and limits which govern our conduct and operational risks. This committee is co-chaired by a managing director in Global Compliance and the head of Operational Risk Management, who are appointed as co-chairs by the chairs of the Firmwide Enterprise Risk Committee.
- **Firmwide Technology Risk Committee.** The Firmwide Technology Risk Committee reviews matters related to the design, development, deployment and use of technology. This committee oversees cyber security matters, as well as technology risk management frameworks and methodologies, and monitors their effectiveness. This committee is co-chaired by our chief information officer and the head of Global Investment Research, who are appointed as co-chairs by the chairs of the Firmwide Enterprise Risk Committee.
- **Global Business Resilience Committee.** The Global Business Resilience Committee is responsible for oversight of business resilience initiatives, promoting increased levels of security and resilience, and reviewing certain operating risks related to business resilience. This committee is chaired by our chief administrative officer, who is appointed as chair by the chairs of the Firmwide Enterprise Risk Committee.

Conflicts Management

Conflicts of interest and our approach to dealing with them are fundamental to our client relationships, our reputation and our long-term success. The term "conflict of interest" does not have a universally accepted meaning, and conflicts can arise in many forms within a business or between businesses. The responsibility for identifying potential conflicts, as well as complying with our policies and procedures, is shared by the entire firm.

We have a multilayered approach to resolving conflicts and addressing reputational risk. Our senior management oversees policies related to conflicts resolution, and, in conjunction with Conflicts, Legal and Compliance, the Firmwide Client and Business Standards Committee, and other internal committees, formulates policies, standards and principles, and assists in making judgments regarding the appropriate resolution of particular conflicts. Resolving potential conflicts necessarily depends on the facts and circumstances of a particular situation and the application of experienced and informed judgment.

As a general matter, Conflicts reviews financing and advisory assignments in Investment Banking and certain of our investing, lending and other activities. In addition, we have various transaction oversight committees, such as the Firmwide Capital, Commitments and Suitability Committees and other committees that also review new underwritings, loans, investments and structured products. These groups and committees work with internal and external counsel and Compliance to evaluate and address any actual or potential conflicts. Conflicts reports to our president and chief operating officer.

We regularly assess our policies and procedures that address conflicts of interest in an effort to conduct our business in accordance with the highest ethical standards and in compliance with all applicable laws, rules and regulations.

Liquidity Risk Management

Overview

Liquidity risk is the risk that we will be unable to fund the firm or meet our liquidity needs in the event of firm-specific, broader industry or market liquidity stress events. Liquidity is of critical importance to us, as most of the failures of financial institutions have occurred in large part due to insufficient liquidity. Accordingly, we have in place a comprehensive and conservative set of liquidity and funding policies. Our principal objective is to be able to fund the firm and to enable our core businesses to continue to serve clients and generate revenues, even under adverse circumstances.

Treasury has the primary responsibility for assessing, monitoring and managing our liquidity and funding strategy. Treasury is independent of the revenue-producing units and reports to our chief financial officer.

Liquidity Risk Management is an independent risk management function responsible for control and oversight of our liquidity risk management framework, including stress testing and limit governance. Liquidity Risk Management is independent of the revenue-producing units and Treasury, and reports to our chief risk officer.

Liquidity Risk Management Principles

We manage liquidity risk according to three principles (i) hold sufficient excess liquidity in the form of GCLA to cover outflows during a stressed period, (ii) maintain appropriate Asset-Liability Management and (iii) maintain a viable Contingency Funding Plan.

GCLA. GCLA is liquidity that we maintain to meet a broad range of potential cash outflows and collateral needs in a stressed environment. Our most important liquidity policy is to pre-fund our estimated potential cash and collateral needs during a liquidity crisis and hold this liquidity in the form of unencumbered, highly liquid securities and cash. We believe that the securities held in our GCLA would be readily convertible to cash in a matter of days, through liquidation, by entering into repurchase agreements or from maturities of resale agreements, and that this cash would allow us to meet immediate obligations without needing to sell other assets or depend on additional funding from credit-sensitive markets.

Our GCLA reflects the following principles:

- The first days or weeks of a liquidity crisis are the most critical to a company's survival;
- Focus must be maintained on all potential cash and collateral outflows, not just disruptions to financing flows. Our businesses are diverse, and our liquidity needs are determined by many factors, including market movements, collateral requirements and client commitments, all of which can change dramatically in a difficult funding environment;
- During a liquidity crisis, credit-sensitive funding, including unsecured debt, certain deposits and some types of secured financing agreements, may be unavailable, and the terms (e.g., interest rates, collateral provisions and tenor) or availability of other types of secured financing may change and certain deposits may be withdrawn; and
- As a result of our policy to pre-fund liquidity that we estimate may be needed in a crisis, we hold more unencumbered securities and have larger debt balances than our businesses would otherwise require. We believe that our liquidity is stronger with greater balances of highly liquid unencumbered securities, even though it increases our total assets and our funding costs.

We maintain our GCLA across Group Inc., Funding IHC and Group Inc.'s major broker-dealer and bank subsidiaries, asset types, and clearing agents to provide us with sufficient operating liquidity to ensure timely settlement in all major markets, even in a difficult funding environment. In addition to the GCLA, we maintain cash balances and securities in several of our other entities, primarily for use in specific currencies, entities, or jurisdictions where we do not have immediate access to parent company liquidity.

We believe that our GCLA provides us with a resilient source of funds that would be available in advance of potential cash and collateral outflows and gives us significant flexibility in managing through a difficult funding environment.

Asset-Liability Management. Our liquidity risk management policies are designed to ensure we have a sufficient amount of financing, even when funding markets experience persistent stress. We manage the maturities and diversity of our funding across markets, products and counterparties, and seek to maintain a diversified funding profile with an appropriate tenor, taking into consideration the characteristics and liquidity profile of our assets.

Our approach to asset-liability management includes:

- Conservatively managing the overall characteristics of our funding book, with a focus on maintaining long-term, diversified sources of funding in excess of our current requirements. See "Balance Sheet and Funding Sources — Funding Sources" for further details;

- Actively managing and monitoring our asset base, with particular focus on the liquidity, holding period and our ability to fund assets on a secured basis. We assess our funding requirements and our ability to liquidate assets in a stressed environment while appropriately managing risk. This enables us to determine the most appropriate funding products and tenors. See "Balance Sheet and Funding Sources — Balance Sheet Management" for further details on our balance sheet management process and "— Funding Sources — Secured Funding" for further details on asset classes that may be harder to fund on a secured basis; and
- Raising secured and unsecured financing that has a long tenor relative to the liquidity profile of our assets. This reduces the risk that our liabilities will come due in advance of our ability to generate liquidity from the sale of our assets. Because we maintain a highly liquid balance sheet, the holding period of certain of our assets may be materially shorter than their contractual maturity dates.

Our goal is to ensure that we maintain sufficient liquidity to fund our assets and meet our contractual and contingent obligations in normal times, as well as during periods of market stress. Through our dynamic balance sheet management process, we use actual and projected asset balances to determine secured and unsecured funding requirements. Funding plans are reviewed and approved by the Firmwide Finance Committee on a quarterly basis. In addition, senior managers in our independent control and support functions regularly analyze, and the Firmwide Finance Committee reviews, our consolidated total capital position (unsecured long-term borrowings plus total shareholders' equity) so that we maintain a level of long-term funding that is sufficient to meet our long-term financing requirements. In a liquidity crisis, we would first use our GCLA in order to avoid reliance on asset sales (other than our GCLA). However, we recognize that orderly asset sales may be prudent or necessary in a severe or persistent liquidity crisis.

Subsidiary Funding Policies

The majority of our unsecured funding is raised by Group Inc., which lends the necessary funds to Funding IHC and other subsidiaries, some of which are regulated, to meet their asset financing, liquidity and capital requirements. In addition, Group Inc. provides its regulated subsidiaries with the necessary capital to meet their regulatory requirements. The benefits of this approach to subsidiary funding are enhanced control and greater flexibility to meet the funding requirements of our subsidiaries. Funding is also raised at the subsidiary level through a variety of products, including deposits, secured funding and unsecured borrowings.

Our intercompany funding policies assume that a subsidiary's funds or securities are not freely available to its parent, Funding IHC or other subsidiaries unless (i) legally provided for and (ii) there are no additional regulatory, tax or other restrictions. In particular, many of our subsidiaries are subject to laws that authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to Group Inc. or Funding IHC. Regulatory action of that kind could impede access to funds that Group Inc. needs to make payments on its obligations. Accordingly, we assume that the capital provided to our regulated subsidiaries is not available to Group Inc. or other subsidiaries and any other financing provided to our regulated subsidiaries is not available to Group Inc. or Funding IHC until the maturity of such financing.

Group Inc. has provided substantial amounts of equity and subordinated indebtedness, directly or indirectly, to its regulated subsidiaries. For example, as of March 2018, Group Inc. had $30.31 billion of equity and subordinated indebtedness invested in GS&Co., its principal U.S. registered broker-dealer; $37.94 billion invested in GSI, a regulated U.K. broker-dealer; $2.87 billion invested in GSJCL, a regulated Japanese broker-dealer; $30.35 billion invested in GS Bank USA, a regulated New York State-chartered bank; and $3.90 billion invested in GSIB, a regulated U.K. bank. Group Inc. also provided, directly or indirectly, $111.43 billion of unsubordinated loans (including secured loans of $45.42 billion), and $13.20 billion of collateral and cash deposits to these entities, substantially all of which was to GS&Co., GSI, GSJCL and GS Bank USA, as of March 2018. In addition, as of March 2018, Group Inc. had significant amounts of capital invested in and loans to its other regulated subsidiaries.

Contingency Funding Plan. We maintain a contingency funding plan to provide a framework for analyzing and responding to a liquidity crisis situation or periods of market stress. Our contingency funding plan outlines a list of potential risk factors, key reports and metrics that are reviewed on an ongoing basis to assist in assessing the severity of, and managing through, a liquidity crisis and/or market dislocation. The contingency funding plan also describes in detail our potential responses if our assessments indicate that we have entered a liquidity crisis, which include pre-funding for what we estimate will be our potential cash and collateral needs, as well as utilizing secondary sources of liquidity. Mitigants and action items to address specific risks which may arise are also described and assigned to individuals responsible for execution.

The contingency funding plan identifies key groups of individuals to foster effective coordination, control and distribution of information, all of which are critical in the management of a crisis or period of market stress. The contingency funding plan also details the responsibilities of these groups and individuals, which include making and disseminating key decisions, coordinating all contingency activities throughout the duration of the crisis or period of market stress, implementing liquidity maintenance activities and managing internal and external communication.

Liquidity Stress Tests

In order to determine the appropriate size of our GCLA, we use an internal liquidity model, referred to as the Modeled Liquidity Outflow, which captures and quantifies our liquidity risks. We also consider other factors including, but not limited to, an assessment of our potential intraday liquidity needs through an additional internal liquidity model, referred to as the Intraday Liquidity Model, the results of our long-term stress testing models, our resolution liquidity models and other applicable regulatory requirements and a qualitative assessment of our condition, as well as the financial markets. The results of the Modeled Liquidity Outflow, the Intraday Liquidity Model, the long-term stress testing models and the resolution liquidity models are reported to senior management on a regular basis.

Modeled Liquidity Outflow. Our Modeled Liquidity Outflow is based on conducting multiple scenarios that include combinations of market-wide and firm-specific stress. These scenarios are characterized by the following qualitative elements:

- Severely challenged market environments, including low consumer and corporate confidence, financial and political instability, adverse changes in market values, including potential declines in equity markets and widening of credit spreads; and
- A firm-specific crisis potentially triggered by material losses, reputational damage, litigation, executive departure, and/or a ratings downgrade.

The following are the critical modeling parameters of the Modeled Liquidity Outflow:

- Liquidity needs over a 30-day scenario;
- A two-notch downgrade of our long-term senior unsecured credit ratings;
- A combination of contractual outflows, such as upcoming maturities of unsecured debt, and contingent outflows (e.g., actions though not contractually required, we may deem necessary in a crisis). We assume that most contingent outflows will occur within the initial days and weeks of a crisis;
- No issuance of equity or unsecured debt;
- No support from additional government funding facilities. Although we have access to various central bank funding programs, we do not assume reliance on additional sources of funding in a liquidity crisis; and
- No asset liquidation, other than the GCLA.

The potential contractual and contingent cash and collateral outflows covered in our Modeled Liquidity Outflow include:

Unsecured Funding

- Contractual: All upcoming maturities of unsecured long-term debt, commercial paper, and other unsecured funding products. We assume that we will be unable to issue new unsecured debt or roll over any maturing debt.
- Contingent: Repurchases of our outstanding long-term debt, commercial paper and hybrid financial instruments in the ordinary course of business as a market maker.

Deposits

- Contractual: All upcoming maturities of term deposits. We assume that we will be unable to raise new term deposits or roll over any maturing term deposits.
- Contingent: Partial withdrawals of deposits that have no contractual maturity. The withdrawal assumptions reflect, among other factors, the type of deposit, whether the deposit is insured or uninsured, and our relationship with the depositor.

Secured Funding

- Contractual: A portion of upcoming contractual maturities of secured funding due to either the inability to refinance or the ability to refinance only at wider haircuts (i.e., on terms which require us to post additional collateral). Our assumptions reflect, among other factors, the quality of the underlying collateral, counterparty roll probabilities (our assessment of the counterparty's likelihood of continuing to provide funding on a secured basis at the maturity of the trade) and counterparty concentration.
- Contingent: Adverse changes in the value of financial assets pledged as collateral for financing transactions, which would necessitate additional collateral postings under those transactions.

OTC Derivatives

- Contingent: Collateral postings to counterparties due to adverse changes in the value of our OTC derivatives, excluding those that are cleared and settled through central counterparties (OTC-cleared).

- Contingent: Other outflows of cash or collateral related to OTC derivatives, excluding OTC-cleared, including the impact of trade terminations, collateral substitutions, collateral disputes, loss of rehypothecation rights, collateral calls or termination payments required by a two-notch downgrade in our credit ratings, and collateral that has not been called by counterparties, but is available to them.

Exchange-Traded and OTC-cleared Derivatives

- Contingent: Variation margin postings required due to adverse changes in the value of our outstanding exchange-traded and OTC-cleared derivatives.
- Contingent: An increase in initial margin and guaranty fund requirements by derivative clearing houses.

Customer Cash and Securities

- Contingent: Liquidity outflows associated with our prime brokerage business, including withdrawals of customer credit balances, and a reduction in customer short positions, which may serve as a funding source for long positions.

Securities

- Contingent: Liquidity outflows associated with a reduction or composition change in our short positions, which may serve as a funding source for long positions.

Unfunded Commitments

- Contingent: Draws on our unfunded commitments. Draw assumptions reflect, among other things, the type of commitment and counterparty.

Other

- Other upcoming large cash outflows, such as tax payments.

Intraday Liquidity Model. Our Intraday Liquidity Model measures our intraday liquidity needs using a scenario analysis characterized by the same qualitative elements as our Modeled Liquidity Outflow. The model assesses the risk of increased intraday liquidity requirements during a scenario where access to sources of intraday liquidity may become constrained.

The following are key modeling elements of the Intraday Liquidity Model:

- Liquidity needs over a one-day settlement period;
- Delays in receipt of counterparty cash payments;
- A reduction in the availability of intraday credit lines at our third-party clearing agents; and
- Higher settlement volumes due to an increase in activity.

Long-Term Stress Testing. We utilize longer-term stress tests to take a forward view on our liquidity position through prolonged stress periods in which we experience a severe liquidity stress and recover in an environment that continues to be challenging. We are focused on ensuring conservative asset-liability management to prepare for a prolonged period of potential stress, seeking to maintain a diversified funding profile with an appropriate tenor, taking into consideration the characteristics and liquidity profile of our assets.

We also perform stress tests on a regular basis as part of our routine risk management processes and conduct tailored stress tests on an ad hoc or product-specific basis in response to market developments.

Resolution Liquidity Models. In connection with our resolution planning efforts, we have established our Resolution Liquidity Adequacy and Positioning framework, which estimates liquidity needs of our major subsidiaries in a stressed environment. The liquidity needs are measured using our Modeled Liquidity Outflow assumptions and include certain additional inter-affiliate exposures. We have also established our Resolution Liquidity Execution Need framework, which measures the liquidity needs of our major subsidiaries to stabilize and wind-down following a Group Inc. bankruptcy filing in accordance with our preferred resolution strategy.

In addition, we have established a triggers and alerts framework, which is designed to provide the Board with information needed to make an informed decision on whether and when to commence bankruptcy proceedings for Group Inc.

Model Review and Validation

Treasury regularly refines our Modeled Liquidity Outflow, Intraday Liquidity Model and our other stress testing models to reflect changes in market or economic conditions and our business mix. Any changes, including model assumptions, are assessed and approved by Liquidity Risk Management.

Model Risk Management is responsible for the independent review and validation of our liquidity models. See "Model Risk Management" for further information about the review and validation of these models.

Limits

We use liquidity limits at various levels and across liquidity risk types to manage the size of our liquidity exposures. Limits are measured relative to acceptable levels of risk given our liquidity risk tolerance. The purpose of the firmwide limits is to assist senior management in monitoring and controlling our overall liquidity profile.

The Risk Committee of the Board and the Firmwide Finance Committee approve liquidity risk limits at the firmwide level. Limits are reviewed frequently and amended, with required approvals, on a permanent and temporary basis, as appropriate, to reflect changing market or business conditions.

Our liquidity risk limits are monitored by Treasury and Liquidity Risk Management. Treasury is responsible for identifying and escalating, on a timely basis, instances where limits have been exceeded.

GCLA and Unencumbered Metrics

GCLA. Based on the results of our internal liquidity risk models, described above, as well as our consideration of other factors including, but not limited to, an assessment of our potential intraday liquidity needs and a qualitative assessment of our condition, as well as the financial markets, we believe our liquidity position as of both March 2018 and December 2017 was appropriate. We strictly limit our GCLA to a narrowly defined list of securities and cash because they are highly liquid, even in a difficult funding environment. We do not include other potential sources of excess liquidity in our GCLA, such as less liquid unencumbered securities or committed credit facilities.

The table below presents the average fair value of the securities and certain overnight cash deposits that are included in our GCLA.

	Average for the Three Months Ended	
$ in millions	**March 2018**	December 2017
U.S. dollar-denominated	**$150,070**	$157,097
Non-U.S. dollar-denominated	**78,955**	64,155
Total	**$229,025**	$221,252

The table below presents the average fair value of our GCLA by asset class.

	Average for the Three Months Ended	
$ in millions	**March 2018**	December 2017
Overnight cash deposits	**$102,334**	$ 91,716
U.S. government obligations	**69,632**	80,156
U.S. agency obligations	**9,429**	9,538
Non-U.S. government obligations	**47,630**	39,842
Total	**$229,025**	$221,252

In the tables above:

- The U.S. dollar-denominated GCLA consists of (i) unencumbered U.S. government and agency obligations (including highly liquid U.S. agency mortgage-backed obligations), all of which are eligible as collateral in Federal Reserve open market operations and (ii) certain overnight U.S. dollar cash deposits.
- The non-U.S. dollar-denominated GCLA consists of non-U.S. government obligations (only unencumbered German, French, Japanese and U.K. government obligations) and certain overnight cash deposits in highly liquid currencies.

The table below presents the average GCLA of Group Inc. and Funding IHC, and Group Inc.'s major broker-dealer and bank subsidiaries.

	Average for the Three Months Ended	
$ in millions	**March 2018**	December 2017
Group Inc. and Funding IHC	**$ 41,059**	$ 39,993
Major broker-dealer subsidiaries	**103,423**	101,349
Major bank subsidiaries	**84,543**	79,910
Total	**$229,025**	$221,252

We maintain our GCLA to enable us to meet current and potential liquidity requirements of our parent company, Group Inc., and its subsidiaries. Our Modeled Liquidity Outflow and Intraday Liquidity Model incorporate a consolidated requirement for Group Inc., as well as a standalone requirement for each of our major broker-dealer and bank subsidiaries. During the second quarter of 2017, in connection with our resolution plan, Group Inc. transferred substantially all of its GCLA to Funding IHC. Funding IHC is required to provide the necessary liquidity to Group Inc. during the ordinary course of business, and is also obligated to provide capital and liquidity support to major subsidiaries in the event of our material financial distress or failure. Liquidity held directly in each of our major broker-dealer and bank subsidiaries is intended for use only by that subsidiary to meet its liquidity requirements and is assumed not to be available to Group Inc. or Funding IHC unless (i) legally provided for and (ii) there are no additional regulatory, tax or other restrictions. In addition, the Modeled Liquidity Outflow and Intraday Liquidity Model also incorporate a broader assessment of standalone liquidity requirements for other subsidiaries and we hold a portion of our GCLA directly at Group Inc. or Funding IHC to support such requirements.

Other Unencumbered Assets. In addition to our GCLA, we have a significant amount of other unencumbered cash and financial instruments, including other government obligations, high-grade money market securities, corporate obligations, marginable equities, loans and cash deposits not included in our GCLA. The fair value of our unencumbered assets averaged $170.17 billion and $173.09 billion for the three months ended March 2018 and December 2017, respectively. We do not consider these assets liquid enough to be eligible for our GCLA.

Liquidity Regulatory Framework

As a BHC, we are subject to a minimum Liquidity Coverage Ratio (LCR) under the LCR rule approved by the U.S. federal bank regulatory agencies. The LCR rule requires organizations to maintain an adequate ratio of eligible high-quality liquid assets (HQLA) to expected net cash outflows under an acute short-term liquidity stress scenario. Eligible HQLA excludes HQLA held by subsidiaries that is in excess of their minimum requirement and is subject to transfer restrictions. We are required to maintain a minimum LCR of 100%.

The table below presents information about our average daily LCR.

$ in millions	**Average for the Three Months Ended March 2018**
Total HQLA	**$224,134**
Eligible HQLA	**$161,823**
Net cash outflows	**$125,816**
LCR	**129%**

We expect that fluctuations in client activity, business mix and the overall market environment will impact our average LCR in the future.

In addition, the U.S. federal bank regulatory agencies have issued a proposed rule that calls for a net stable funding ratio (NSFR) for large U.S. banking organizations. The proposal would require banking organizations to ensure they have access to stable funding over a one-year time horizon. The proposed rule includes quarterly disclosure of the ratio, as well as a description of the banking organization's stable funding sources. The U.S. federal bank regulatory agencies have not released the final rule. We expect that we will be compliant with the NSFR requirement by the effective date of the final rule.

The following is information on our subsidiary liquidity regulatory requirements:

- **GS Bank USA.** GS Bank USA is subject to a minimum LCR of 100% under the LCR rule approved by the U.S. federal bank regulatory agencies. As of March 2018, GS Bank USA's LCR exceeded the minimum requirement. The U.S. federal bank regulatory agencies' proposed NSFR requirement described above would also apply to GS Bank USA.

- **GSI.** GSI is subject to a minimum LCR of 100% under the LCR rule approved by the U.K. regulatory authorities and the European Commission. GSI's average monthly LCR for the trailing twelve-month period ended March 2018 exceeded the minimum requirement.

- **Other Subsidiaries.** We monitor the local regulatory liquidity requirements of our subsidiaries to ensure compliance. For many of our subsidiaries, these requirements either have changed or are likely to change in the future due to the implementation of the Basel Committee's framework for liquidity risk measurement, standards and monitoring, as well as other regulatory developments.

The implementation of these rules, and any amendments adopted by the applicable regulatory authorities, could impact our liquidity and funding requirements and practices in the future.

Credit Ratings

We rely on the short-term and long-term debt capital markets to fund a significant portion of our day-to-day operations and the cost and availability of debt financing is influenced by our credit ratings. Credit ratings are also important when we are competing in certain markets, such as OTC derivatives, and when we seek to engage in longer-term transactions. See "Risk Factors" in Part I, Item 1A of the 2017 Form 10-K for information about the risks associated with a reduction in our credit ratings.

The table below presents the unsecured credit ratings and outlook of Group Inc. by DBRS, Inc. (DBRS), Fitch, Inc. (Fitch), Moody's Investors Service (Moody's), Rating and Investment Information, Inc. (R&I), and Standard & Poor's Ratings Services (S&P).

	As of March 2018				
	DBRS	**Fitch**	**Moody's**	**R&I**	**S&P**
Short-term debt	**R-1 (middle)**	**F1**	**P-2**	**a-1**	**A-2**
Long-term debt	**A (high)**	**A**	**A3**	**A**	**BBB+**
Subordinated debt	**A**	**A-**	**Baa2**	**A-**	**BBB-**
Trust preferred	**A**	**BBB-**	**Baa3**	**N/A**	**BB**
Preferred stock	**BBB (high)**	**BB+**	**Ba1**	**N/A**	**BB**
Ratings outlook	**Stable**	**Stable**	**Stable**	**Stable**	**Stable**

In the table above:

- The ratings for trust preferred relate to the guaranteed preferred beneficial interests issued by Goldman Sachs Capital I.

- The DBRS, Fitch, Moody's and S&P ratings for preferred stock include the APEX issued by Goldman Sachs Capital II and Goldman Sachs Capital III.

The table below presents the unsecured credit ratings and outlook of GS Bank USA, GSIB, GS&Co. and GSI, by Fitch, Moody's and S&P.

	As of March 2018		
	Fitch	Moody's	S&P
GS Bank USA			
Short-term debt	F1	P-1	A-1
Long-term debt	A+	A1	A+
Short-term bank deposits	F1+	P-1	N/A
Long-term bank deposits	AA-	A1	N/A
Ratings outlook	Stable	Negative	Stable
GSIB			
Short-term debt	F1	P-1	A-1
Long-term debt	A	A1	A+
Short-term bank deposits	F1	P-1	N/A
Long-term bank deposits	A	A1	N/A
Ratings outlook	Stable	Negative	Stable
GS&Co.			
Short-term debt	F1	N/A	A-1
Long-term debt	A+	N/A	A+
Ratings outlook	Stable	N/A	Stable
GSI			
Short-term debt	F1	P-1	A-1
Long-term debt	A	A1	A+
Ratings outlook	Stable	Negative	Stable

During the first quarter of 2018, Moody's changed the outlook for GS Bank USA, GSIB and GSI from stable to negative.

We believe our credit ratings are primarily based on the credit rating agencies' assessment of:

- Our liquidity, market, credit and operational risk management practices;
- The level and variability of our earnings;
- Our capital base;
- Our franchise, reputation and management;
- Our corporate governance; and
- The external operating and economic environment, including, in some cases, the assumed level of government support or other systemic considerations, such as potential resolution.

Certain of our derivatives have been transacted under bilateral agreements with counterparties who may require us to post collateral or terminate the transactions based on changes in our credit ratings. We manage our GCLA to ensure we would, among other potential requirements, be able to make the additional collateral or termination payments that may be required in the event of a two-notch reduction in our long-term credit ratings, as well as collateral that has not been called by counterparties, but is available to them.

See Note 7 to the condensed consolidated financial statements for further information about derivatives with credit-related contingent features and the additional collateral or termination payments related to our net derivative liabilities under bilateral agreements that could have been called by counterparties in the event of a one-notch and two-notch downgrade in our credit ratings.

Cash Flows

As a global financial institution, our cash flows are complex and bear little relation to our net earnings and net assets. Consequently, we believe that traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity and asset-liability management policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends and strategic initiatives in our businesses.

Three Months Ended March 2018. Our cash and cash equivalents increased by $10.45 billion to $120.50 billion at the end of the first quarter of 2018, primarily due to net cash generated from financing activities partially offset by net cash used for investing activities. The net cash generated from financing activities primarily reflected net issuances of unsecured long-term borrowings and increases in institutional and Marcus deposits. The net cash used for investing activities was primarily to fund loans receivable to corporate borrowers and loans backed by commercial real estate, and investments in U.S. government and agency obligations accounted for as available-for-sale.

Three Months Ended March 2017. Our cash and cash equivalents increased by $1.32 billion to $123.04 billion at the end of the first quarter of 2017. We generated $6.26 billion in net cash from financing activities, primarily from net issuances of unsecured long-term borrowings. We used $3.39 billion in net cash from operating activities, primarily related to an increase in financial instruments owned and receivables from customers and counterparties, partially offset by a decrease in collateralized transactions. We used $1.55 billion in net cash from investing activities, primarily related to purchases of property, leasehold improvements and equipment and to fund loans receivable.

Market Risk Management

Overview

Market risk is the risk of loss in the value of our inventory, as well as certain other financial assets and financial liabilities, due to changes in market conditions. We employ a variety of risk measures, each described in the respective sections below, to monitor market risk. We hold inventory primarily for market making for our clients and for our investing and lending activities. Our inventory, therefore, changes based on client demands and our investment opportunities. Our inventory is accounted for at fair value and therefore fluctuates on a daily basis, with the related gains and losses included in market making and other principal transactions. Categories of market risk include the following:

- Interest rate risk: results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, prepayment speeds and credit spreads;
- Equity price risk: results from exposures to changes in prices and volatilities of individual equities, baskets of equities and equity indices;
- Currency rate risk: results from exposures to changes in spot prices, forward prices and volatilities of currency rates; and
- Commodity price risk: results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, electricity, and precious and base metals.

Market Risk Management, which is independent of the revenue-producing units and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing our market risk. We monitor and control risks through strong firmwide oversight and independent control and support functions across our global businesses.

Managers in revenue-producing units and Market Risk Management discuss market information, positions and estimated risk and loss scenarios on an ongoing basis. Managers in revenue-producing units are accountable for managing risk within prescribed limits. These managers have in-depth knowledge of their positions, markets and the instruments available to hedge their exposures.

Market Risk Management Process

We manage our market risk by diversifying exposures, controlling position sizes and establishing economic hedges in related securities or derivatives. This process includes:

- Accurate and timely exposure information incorporating multiple risk metrics;
- A dynamic limit-setting framework; and
- Constant communication among revenue-producing units, risk managers and senior management.

Risk Measures

Market Risk Management produces risk measures and monitors them against established market risk limits. These measures reflect an extensive range of scenarios and the results are aggregated at product, business and firmwide levels.

We use a variety of risk measures to estimate the size of potential losses for both moderate and more extreme market moves over both short-term and long-term time horizons. Our primary risk measures are VaR, which is used for shorter-term periods, and stress tests. Our risk reports detail key risks, drivers and changes for each desk and business, and are distributed daily to senior management of both our revenue-producing units and our independent control and support functions.

Value-at-Risk. VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. For assets and liabilities included in VaR, see "Financial Statement Linkages to Market Risk Measures." We typically employ a one-day time horizon with a 95% confidence level. We use a single VaR model which captures risks including interest rates, equity prices, currency rates and commodity prices. As such, VaR facilitates comparison across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the firmwide level.

We are aware of the inherent limitations to VaR and therefore use a variety of risk measures in our market risk management process. Inherent limitations to VaR include:

- VaR does not estimate potential losses over longer time horizons where moves may be extreme;
- VaR does not take account of the relative liquidity of different risk positions; and
- Previous moves in market risk factors may not produce accurate predictions of all future market moves.

When calculating VaR, we use historical simulations with full valuation of approximately 70,000 market factors. VaR is calculated at a position level based on simultaneously shocking the relevant market risk factors for that position. We sample from five years of historical data to generate the scenarios for our VaR calculation. The historical data is weighted so that the relative importance of the data reduces over time. This gives greater importance to more recent observations and reflects current asset volatilities, which improves the accuracy of our estimates of potential loss. As a result, even if our positions included in VaR were unchanged, our VaR would increase with increasing market volatility and vice versa.

Given its reliance on historical data, VaR is most effective in estimating risk exposures in markets in which there are no sudden fundamental changes or shifts in market conditions.

Our VaR measure does not include:

- Positions that are best measured and monitored using sensitivity measures; and
- The impact of changes in counterparty and our own credit spreads on derivatives, as well as changes in our own credit spreads on financial liabilities for which the fair value option was elected.

We perform daily backtesting of our VaR model (i.e., comparing daily net revenues for positions included in VaR to the VaR measure calculated as of the prior business day) at the firmwide level and for each of our businesses and major regulated subsidiaries.

Stress Testing. Stress testing is a method of determining the effect of various hypothetical stress scenarios. We use stress testing to examine risks of specific portfolios, as well as the potential impact of our significant risk exposures. We use a variety of stress testing techniques to calculate the potential loss from a wide range of market moves on our portfolios, including sensitivity analysis, scenario analysis and firmwide stress tests. The results of our various stress tests are analyzed together for risk management purposes.

Sensitivity analysis is used to quantify the impact of a market move in a single risk factor across all positions (e.g., equity prices or credit spreads) using a variety of defined market shocks, ranging from those that could be expected over a one-day time horizon up to those that could take many months to occur. We also use sensitivity analysis to quantify the impact of the default of any single entity, which captures the risk of large or concentrated exposures.

Scenario analysis is used to quantify the impact of a specified event, including how the event impacts multiple risk factors simultaneously. For example, for sovereign stress testing we calculate potential direct exposure associated with our sovereign inventory, as well as the corresponding debt, equity and currency exposures associated with our non-sovereign inventory that may be impacted by the sovereign distress. When conducting scenario analysis, we typically consider a number of possible outcomes for each scenario, ranging from moderate to severely adverse market impacts. In addition, these stress tests are constructed using both historical events and forward-looking hypothetical scenarios.

Firmwide stress testing combines market, credit, operational and liquidity risks into a single combined scenario. Firmwide stress tests are primarily used to assess capital adequacy as part of our capital planning and stress testing process; however, firmwide stress testing is also integrated into our risk governance framework. This includes selecting appropriate scenarios to use for our capital planning and stress testing process. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" above for further information.

Unlike VaR measures, which have an implied probability because they are calculated at a specified confidence level, there is generally no implied probability that our stress test scenarios will occur. Instead, stress tests are used to model both moderate and more extreme moves in underlying market factors. When estimating potential loss, we generally assume that our positions cannot be reduced or hedged (although experience demonstrates that we are generally able to do so).

Stress test scenarios are conducted on a regular basis as part of our routine risk management process and on an ad hoc basis in response to market events or concerns. Stress testing is an important part of our risk management process because it allows us to quantify our exposure to tail risks, highlight potential loss concentrations, undertake risk/reward analysis, and assess and mitigate our risk positions.

Limits. We use risk limits at various levels (including firmwide, business and product) to govern our risk appetite by controlling the size of our exposures to market risk. Limits are set based on VaR and on a range of stress tests relevant to our exposures. Limits are reviewed frequently and amended on a permanent or temporary basis to reflect changing market conditions, business conditions or tolerance for risk.

The Risk Committee of the Board and the Risk Governance Committee (through delegated authority from the Firmwide Risk Committee) approve market risk limits and sub-limits at firmwide, business and product levels, consistent with our risk appetite statement. In addition, Market Risk Management (through delegated authority from the Risk Governance Committee) sets market risk limits and sub-limits at certain product and desk levels.

The purpose of the firmwide limits is to assist senior management in controlling our overall risk profile. Sub-limits are set below the approved level of risk limits. Sub-limits set the desired maximum amount of exposure that may be managed by any particular business on a day-to-day basis without additional levels of senior management approval, effectively leaving day-to-day decisions to individual desk managers and traders. Accordingly, sub-limits are a management tool designed to ensure appropriate escalation rather than to establish maximum risk tolerance. Sub-limits also distribute risk among various businesses in a manner that is consistent with their level of activity and client demand, taking into account the relative performance of each area.

Our market risk limits are monitored daily by Market Risk Management, which is responsible for identifying and escalating, on a timely basis, instances where limits have been exceeded.

When a risk limit has been exceeded (e.g., due to positional changes or changes in market conditions, such as increased volatilities or changes in correlations), it is escalated to senior managers in Market Risk Management and/or the appropriate risk committee. Such instances are remediated by an inventory reduction and/or a temporary or permanent increase to the risk limit.

Model Review and Validation

Our VaR and stress testing models are regularly reviewed by Market Risk Management and enhanced in order to incorporate changes in the composition of positions included in our market risk measures, as well as variations in market conditions. Prior to implementing significant changes to our assumptions and/or models, Model Risk Management performs model validations. Significant changes to our VaR and stress testing models are reviewed with our chief risk officer and chief financial officer, and approved by the Firmwide Risk Committee.

See "Model Risk Management" for further information about the review and validation of these models.

Systems

We have made a significant investment in technology to monitor market risk including:

- An independent calculation of VaR and stress measures;
- Risk measures calculated at individual position levels;
- Attribution of risk measures to individual risk factors of each position;
- The ability to report many different views of the risk measures (e.g., by desk, business, product type or entity); and
- The ability to produce ad hoc analyses in a timely manner.

Metrics

We analyze VaR at the firmwide level and a variety of more detailed levels, including by risk category, business and region. The tables below present average daily VaR and period-end VaR, as well as the high and low VaR for the period. Diversification effect in the tables below represents the difference between total VaR and the sum of the VaRs for the four risk categories. This effect arises because the four market risk categories are not perfectly correlated.

The table below presents average daily VaR by risk category.

	Three Months Ended		
$ in millions	**March 2018**	December 2017	March 2017
Interest rates	**$ 54**	$ 40	$ 44
Equity prices	**34**	28	26
Currency rates	**10**	9	19
Commodity prices	**9**	9	18
Diversification effect	**(34)**	(32)	(43)
Total	**$ 73**	$ 54	$ 64

Our average daily VaR increased to $73 million for the first quarter of 2018 from $54 million for the fourth quarter of 2017, primarily due to increases in the interest rates and equity prices categories, partially offset by an increase in the diversification effect. The overall increase was primarily due to increased exposures.

Our average daily VaR increased to $73 million for the first quarter of 2018 from $64 million for the first quarter of 2017, due to increases in the interest rates and equity prices categories and a decrease in the diversification effect, partially offset by decreases in the currency rates and commodity prices categories. The overall increase was primarily due to increased exposures.

The table below presents period-end VaR by risk category.

	As of		
$ in millions	**March 2018**	December 2017	March 2017
Interest rates	**$ 59**	$ 48	$ 43
Equity prices	**37**	31	27
Currency rates	**9**	7	11
Commodity prices	**10**	9	22
Diversification effect	**(36)**	(30)	(49)
Total	**$ 79**	$ 65	$ 54

Our daily VaR increased to $79 million as of March 2018 from $65 million as of December 2017, primarily due to increases in the interest rates and equity prices categories, partially offset by an increase in the diversification effect. The overall increase was due to higher levels of volatility and increased exposures.

Our daily VaR increased to $79 million as of March 2018 from $54 million as of March 2017, primarily due to increases in the interest rates and equity prices categories and a decrease in the diversification effect, partially offset by a decrease in the commodity prices category. The overall increase was primarily due to increased exposures.

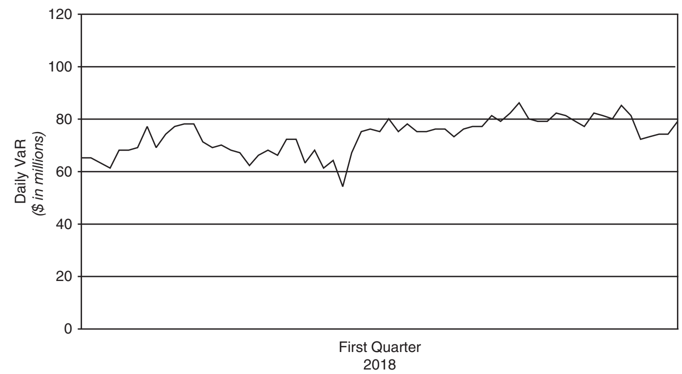
During the first quarter of 2018, the firmwide VaR risk limit was not exceeded, raised or reduced.

The table below presents high and low VaR by risk category.

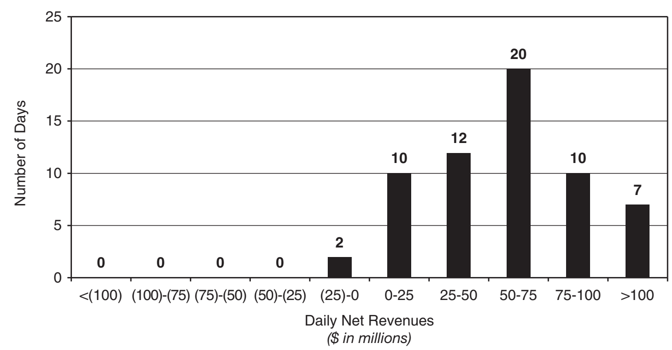
	Three Months Ended March 2018	
$ in millions	**High**	**Low**
Interest rates	**$61**	**$45**
Equity prices	**$45**	**$27**
Currency rates	**$14**	**$ 7**
Commodity prices	**$11**	**$ 8**

The high and low total VaR was $86 million and $54 million, respectively, for the three months ended March 2018.

The chart below reflects our daily VaR for the three months ended March 2018.



The chart below presents the frequency distribution of our daily net revenues for positions included in VaR for the three months ended March 2018.



Daily net revenues for positions included in VaR are compared with VaR calculated as of the end of the prior business day. Net losses incurred on a single day for such positions did not exceed our 95% one-day VaR during the first quarter of 2018 (i.e., a VaR exception).

During periods in which we have significantly more positive net revenue days than net revenue loss days, we expect to have fewer VaR exceptions because, under normal conditions, our business model generally produces positive net revenues. In periods in which our franchise revenues are adversely affected, we generally have more loss days, resulting in more VaR exceptions. The daily net revenues for positions included in VaR used to determine VaR exceptions reflect the impact of any intraday activity, including bid/offer net revenues, which are more likely than not to be positive by their nature.

Sensitivity Measures

Certain portfolios and individual positions are not included in VaR because VaR is not the most appropriate risk measure. Other sensitivity measures we use to analyze market risk are described below.

10% Sensitivity Measures. The table below presents market risk for positions, accounted for at fair value, that are not included in VaR by asset category.

	As of		
$ in millions	**March 2018**	December 2017	March 2017
Equity	**$2,064**	$2,096	$2,116
Debt	**1,609**	1,606	1,653
Total	**$3,673**	$3,702	$3,769

In the table above:

- The market risk of these positions is determined by estimating the potential reduction in net revenues of a 10% decline in the value of these positions.
- Equity positions relate to private and restricted public equity securities, including interests in funds that invest in corporate equities and real estate and interests in hedge funds.
- Debt positions include interests in funds that invest in corporate mezzanine and senior debt instruments, loans backed by commercial and residential real estate, corporate bank loans and other corporate debt, including acquired portfolios of distressed loans.
- Equity and debt funded positions are included in our condensed consolidated statements of financial condition in financial instruments owned. See Note 6 to the condensed consolidated financial statements for further information about cash instruments.
- These measures do not reflect the diversification effect across asset categories or across other market risk measures.

Credit Spread Sensitivity on Derivatives and Financial Liabilities. VaR excludes the impact of changes in counterparty and our own credit spreads on derivatives, as well as changes in our own credit spreads (debt valuation adjustment) on financial liabilities for which the fair value option was elected. The estimated sensitivity to a one basis point increase in credit spreads (counterparty and our own) on derivatives was a gain of $3 million (including hedges) as of both March 2018 and December 2017. In addition, the estimated sensitivity to a one basis point increase in our own credit spreads on financial liabilities for which the fair value option was elected was a gain of $38 million and $35 million as of March 2018 and December 2017, respectively. However, the actual net impact of a change in our own credit spreads is also affected by the liquidity, duration and convexity (as the sensitivity is not linear to changes in yields) of those financial liabilities for which the fair value option was elected, as well as the relative performance of any hedges undertaken.

Interest Rate Sensitivity. Loans receivable as of March 2018 and December 2017 were $71.70 billion and $65.93 billion, respectively, substantially all of which had floating interest rates. As of March 2018 and December 2017, the estimated sensitivity to a 100 basis point increase in interest rates on such loans was $569 million and $527 million, respectively, of additional interest income over a twelve-month period, which does not take into account the potential impact of an increase in costs to fund such loans. See Note 9 to the condensed consolidated financial statements for further information about loans receivable.

Other Market Risk Considerations

As of March 2018 and December 2017, we had commitments and held loans for which we have obtained credit loss protection from Sumitomo Mitsui Financial Group, Inc. See Note 18 to the condensed consolidated financial statements for further information about such lending commitments.

In addition, we make investments in securities that are accounted for as available-for-sale and included in financial instruments owned in the condensed consolidated statements of financial condition. See Note 6 to the condensed consolidated financial statements for further information.

We also make investments accounted for under the equity method and we also make direct investments in real estate, both of which are included in other assets. Direct investments in real estate are accounted for at cost less accumulated depreciation. See Note 13 to the condensed consolidated financial statements for further information about other assets.

Financial Statement Linkages to Market Risk Measures

We employ a variety of risk measures, each described in the respective sections above, to monitor market risk across the condensed consolidated statements of financial condition and condensed consolidated statements of earnings. The related gains and losses on these positions are included in market making, other principal transactions, interest income and interest expense in the condensed consolidated statements of earnings, and debt valuation adjustment in the condensed consolidated statements of comprehensive income.

The table below presents certain categories in our condensed consolidated statements of financial condition and the market risk measures used to assess those assets and liabilities. Certain categories in the condensed consolidated statements of financial condition are incorporated in more than one risk measure.

Categories in the Condensed Consolidated Statements of Financial Condition	Market Risk Measures
Collateralized agreements	VaR
Receivables	VaR Interest Rate Sensitivity
Financial instruments owned	VaR 10% Sensitivity Measures Credit Spread Sensitivity — Derivatives
Deposits, at fair value	Credit Spread Sensitivity — Financial Liabilities
Collateralized financings	VaR
Financial instruments sold, but not yet purchased	VaR Credit Spread Sensitivity — Derivatives
Unsecured short-term and long-term borrowings, at fair value	VaR Credit Spread Sensitivity — Financial Liabilities

Credit Risk Management

Overview

Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an OTC derivatives counterparty or a borrower) or an issuer of securities or other instruments we hold. Our exposure to credit risk comes mostly from client transactions in OTC derivatives and loans and lending commitments. Credit risk also comes from cash placed with banks, securities financing transactions (i.e., resale and repurchase agreements and securities borrowing and lending activities) and receivables from brokers, dealers, clearing organizations, customers and counterparties.

Credit Risk Management, which is independent of the revenue-producing units and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing credit risk. The Firmwide Risk Committee and the Risk Governance Committee establish and review credit policies and parameters. In addition, we hold other positions that give rise to credit risk (e.g., bonds held in our inventory and secondary bank loans). These credit risks are captured as a component of market risk measures, which are monitored and managed by Market Risk Management, consistent with other inventory positions. We also enter into derivatives to manage market risk exposures. Such derivatives also give rise to credit risk, which is monitored and managed by Credit Risk Management.

Credit Risk Management Process

Effective management of credit risk requires accurate and timely information, a high level of communication and knowledge of customers, countries, industries and products. Our process for managing credit risk includes:

- Approving transactions and setting and communicating credit exposure limits;
- Establishing or approving underwriting standards;
- Monitoring compliance with established credit exposure limits;
- Assessing the likelihood that a counterparty will default on its payment obligations;
- Measuring our current and potential credit exposure and losses resulting from counterparty default;
- Reporting of credit exposures to senior management, the Board and regulators;
- Using credit risk mitigants, including collateral and hedging; and
- Communicating and collaborating with other independent control and support functions such as operations, legal and compliance.

As part of the risk assessment process, Credit Risk Management performs credit reviews, which include initial and ongoing analyses of our counterparties. For substantially all of our credit exposures, the core of our process is an annual counterparty credit review. A credit review is an independent analysis of the capacity and willingness of a counterparty to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the counterparty's industry, and the economic environment. Senior personnel within Credit Risk Management, with expertise in specific industries, inspect and approve credit reviews and internal credit ratings.

Our risk assessment process may also include, where applicable, reviewing certain key metrics, such as delinquency status, collateral values, FICO credit scores and other risk factors.

Our global credit risk management systems capture credit exposure to individual counterparties and on an aggregate basis to counterparties and their subsidiaries (economic groups). These systems also provide management with comprehensive information on our aggregate credit risk by product, internal credit rating, industry, country and region.

Risk Measures and Limits

We measure our credit risk based on the potential loss in the event of non-payment by a counterparty using current and potential exposure. For derivatives and securities financing transactions, current exposure represents the amount presently owed to us after taking into account applicable netting and collateral arrangements, while potential exposure represents our estimate of the future exposure that could arise over the life of a transaction based on market movements within a specified confidence level. Potential exposure also takes into account netting and collateral arrangements. For loans and lending commitments, the primary measure is a function of the notional amount of the position.

We use credit limits at various levels (e.g., counterparty, economic group, industry and country), as well as underwriting standards to control the size and nature of our credit exposures. Limits for counterparties and economic groups are reviewed regularly and revised to reflect changing risk appetites for a given counterparty or group of counterparties. Limits for industries and countries are based on our risk tolerance and are designed to allow for regular monitoring, review, escalation and management of credit risk concentrations.

The Risk Committee of the Board and the Risk Governance Committee (through delegated authority from the Firmwide Risk Committee) approve credit risk limits at firmwide, business and product levels, consistent with our risk appetite statement. Credit Risk Management (through delegated authority from the Risk Governance Committee) sets credit limits for individual counterparties, economic groups, industries and countries. Policies authorized by the Firmwide Risk Committee and the Risk Governance Committee prescribe the level of formal approval required for us to assume credit exposure to a counterparty across all product areas, taking into account any applicable netting provisions, collateral or other credit risk mitigants.

Stress Tests

We use regular stress tests to calculate the credit exposures, including potential concentrations that would result from applying shocks to counterparty credit ratings or credit risk factors (e.g., currency rates, interest rates, equity prices). These shocks include a wide range of moderate and more extreme market movements. Some of our stress tests include shocks to multiple risk factors, consistent with the occurrence of a severe market or economic event. In the case of sovereign default, we estimate the direct impact of the default on our sovereign credit exposures, changes to our credit exposures arising from potential market moves in response to the default, and the impact of credit market deterioration on corporate borrowers and counterparties that may result from the sovereign default. Unlike potential exposure, which is calculated within a specified confidence level, with a stress test there is generally no assumed probability of these events occurring.

We perform stress tests on a regular basis as part of our routine risk management processes and conduct tailored stress tests on an ad hoc basis in response to market developments. Stress tests are conducted jointly with our market and liquidity risk functions.

Model Review and Validation

Our potential credit exposure and stress testing models, and any changes to such models or assumptions, are reviewed by Model Risk Management. See "Model Risk Management" for further information about the review and validation of these models.

Risk Mitigants

To reduce our credit exposures on derivatives and securities financing transactions, we may enter into netting agreements with counterparties that permit us to offset receivables and payables with such counterparties. We may also reduce credit risk with counterparties by entering into agreements that enable us to obtain collateral from them on an upfront or contingent basis and/or to terminate transactions if the counterparty's credit rating falls below a specified level. We monitor the fair value of the collateral on a daily basis to ensure that our credit exposures are appropriately collateralized. We seek to minimize exposures where there is a significant positive correlation between the creditworthiness of our counterparties and the market value of collateral we receive.

For loans and lending commitments, depending on the credit quality of the borrower and other characteristics of the transaction, we employ a variety of potential risk mitigants. Risk mitigants include collateral provisions, guarantees, covenants, structural seniority of the bank loan claims and, for certain lending commitments, provisions in the legal documentation that allow us to adjust loan amounts, pricing, structure and other terms as market conditions change. The type and structure of risk mitigants employed can significantly influence the degree of credit risk involved in a loan or lending commitment.

When we do not have sufficient visibility into a counterparty's financial strength or when we believe a counterparty requires support from its parent, we may obtain third-party guarantees of the counterparty's obligations. We may also mitigate our credit risk using credit derivatives or participation agreements.

Credit Exposures

As of March 2018, our aggregate credit exposure increased as compared with December 2017, primarily reflecting an increase in loans and lending commitments and receivables from clearing organizations. The percentage of our credit exposures arising from non-investment-grade counterparties (based on our internally determined public rating agency equivalents) was essentially unchanged as compared with December 2017. Our credit exposure to counterparties that defaulted during the three months ended March 2018 was lower as compared with our credit exposure to counterparties that defaulted during the same prior year period, and such exposure related to loans and lending commitments. Our credit exposure to counterparties that defaulted during the three months ended March 2018 remained low, representing less than 0.5% of our total credit exposure, and estimated losses compared with the same prior year period were lower and not material. Our credit exposures are described further below.

Cash and Cash Equivalents. Our credit exposure on cash and cash equivalents arises from our unrestricted cash, and includes both interest-bearing and non-interest-bearing deposits. To mitigate the risk of credit loss, we place substantially all of our deposits with highly rated banks and central banks.

The table below presents our credit exposure from unrestricted cash and cash equivalents, and the related percentage concentration by industry, region and credit quality.

	As of	
$ in millions	**March 2018**	December 2017
Cash and Cash Equivalents	**$95,539**	$91,609
Industry		
Financial Institutions	**16%**	17%
Sovereign	**84%**	83%
Total	**100%**	100%
Region		
Americas	**59%**	64%
Europe, Middle East and Africa	**25%**	22%
Asia	**16%**	14%
Total	**100%**	100%
Credit Quality (Credit Rating Equivalent)		
AAA	**71%**	72%
AA	**8%**	9%
A	**20%**	18%
BBB	**1%**	1%
Total	**100%**	100%

The table above excludes cash segregated for regulatory and other purposes of $24.96 billion and $18.44 billion as of March 2018 and December 2017, respectively.

OTC Derivatives. Our credit exposure on OTC derivatives arises primarily from our market-making activities. As a market maker, we enter into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. We also enter into derivatives to manage market risk exposures. We manage our credit exposure on OTC derivatives using the credit risk process, measures, limits and risk mitigants described above.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) when a legal right of setoff exists under an enforceable netting agreement (counterparty netting). Derivatives are accounted for at fair value, net of cash collateral received or posted under enforceable credit support agreements (cash collateral netting). We generally enter into OTC derivatives transactions under bilateral collateral arrangements that require the daily exchange of collateral. As credit risk is an essential component of fair value, we include a credit valuation adjustment (CVA) in the fair value of derivatives to reflect counterparty credit risk, as described in Note 7 to the condensed consolidated financial statements. CVA is a function of the present value of expected exposure, the probability of counterparty default and the assumed recovery upon default.

The table below presents our credit exposure from OTC derivatives, and the related percentage concentration by industry and region.

	As of	
$ in millions	**March 2018**	December 2017
OTC Derivatives	**$45,248**	$45,036
Industry		
Consumer, Retail & Healthcare	**2%**	2%
Diversified Industrials	**5%**	5%
Financial Institutions	**24%**	24%
Funds	**25%**	25%
Municipalities & Nonprofit	**5%**	6%
Natural Resources & Utilities	**9%**	10%
Sovereign	**17%**	17%
Technology, Media & Telecommunications	**6%**	4%
Other (including Special Purpose Vehicles)	**7%**	7%
Total	**100%**	100%
Region		
Americas	**30%**	33%
Europe, Middle East and Africa	**61%**	59%
Asia	**9%**	8%
Total	**100%**	100%

The table below presents the distribution of our credit exposure to OTC derivatives by tenor, both before and after the effect of collateral and netting agreements.

$ in millions	Investment-Grade	Non-Investment-Grade / Unrated	Total
As of March 2018			
Less than 1 year	**$ 17,095**	**$ 6,091**	**$ 23,186**
1 - 5 years	**23,580**	**5,490**	**29,070**
Greater than 5 years	**63,663**	**4,347**	**68,010**
Total	**104,338**	**15,928**	**120,266**
Netting	**(67,868)**	**(7,150)**	**(75,018)**
OTC derivative assets	**$ 36,470**	**$ 8,778**	**$ 45,248**
Net credit exposure	**$ 21,305**	**$ 7,975**	**$ 29,280**
As of December 2017			
Less than 1 year	$ 16,232	$ 4,854	$ 21,086
1 - 5 years	23,817	5,465	29,282
Greater than 5 years	62,103	4,441	66,544
Total	102,152	14,760	116,912
Netting	(65,039)	(6,837)	(71,876)
OTC derivative assets	$ 37,113	$ 7,923	$ 45,036
Net credit exposure	$ 22,366	$ 7,248	$ 29,614

In the table above:

- Tenor is based on remaining contractual maturity.
- Counterparty netting within the same tenor category is included within such tenor category. Counterparty netting across tenor categories, as well as cash collateral received under enforceable credit support agreements, is included in netting.
- Net credit exposure represents OTC derivative assets, included in financial instruments owned, less cash collateral and the fair value of securities collateral, primarily U.S. government and agency obligations and non-U.S. government and agency obligations, received under credit support agreements, which management considers when determining credit risk, but such collateral is not eligible for netting under U.S. GAAP.

The tables below present the distribution of our credit exposure to OTC derivatives by tenor and our internally determined public rating agency equivalents.

	Investment-Grade				
$ in millions	AAA	AA	A	BBB	Total
As of March 2018					
Less than 1 year	**$ 1,219**	**$ 3,243**	**$ 6,926**	**$ 5,707**	**$ 17,095**
1 - 5 years	**1,423**	**4,535**	**11,224**	**6,398**	**23,580**
Greater than 5 years	**2,879**	**13,934**	**26,100**	**20,750**	**63,663**
Total	**5,521**	**21,712**	**44,250**	**32,855**	**104,338**
Netting	**(3,160)**	**(10,957)**	**(32,741)**	**(21,010)**	**(67,868)**
OTC derivative assets	**$ 2,361**	**$ 10,755**	**$ 11,509**	**$ 11,845**	**$ 36,470**
Net credit exposure	**$ 1,825**	**$ 7,857**	**$ 4,672**	**$ 6,951**	**$ 21,305**
As of December 2017					
Less than 1 year	$ 663	$ 3,028	$ 7,806	$ 4,735	$ 16,232
1 - 5 years	1,231	4,770	11,975	5,841	23,817
Greater than 5 years	3,263	16,990	21,857	19,993	62,103
Total	5,157	24,788	41,638	30,569	102,152
Netting	(2,678)	(11,131)	(32,143)	(19,087)	(65,039)
OTC derivative assets	$ 2,479	$ 13,657	$ 9,495	$ 11,482	$ 37,113
Net credit exposure	$ 2,245	$ 8,140	$ 5,077	$ 6,904	$ 22,366

	Non-Investment-Grade / Unrated		
$ in millions	BB or lower	Unrated	Total
As of March 2018			
Less than 1 year	**$ 5,589**	**$ 502**	**$ 6,091**
1 - 5 years	**5,486**	**4**	**5,490**
Greater than 5 years	**4,228**	**119**	**4,347**
Total	**15,303**	**625**	**15,928**
Netting	**(7,127)**	**(23)**	**(7,150)**
OTC derivative assets	**$ 8,176**	**$ 602**	**$ 8,778**
Net credit exposure	**$ 7,451**	**$ 524**	**$ 7,975**
As of December 2017			
Less than 1 year	$ 4,603	$ 251	$ 4,854
1 - 5 years	5,458	7	5,465
Greater than 5 years	4,401	40	4,441
Total	14,462	298	14,760
Netting	(6,814)	(23)	(6,837)
OTC derivative assets	$ 7,648	$ 275	$ 7,923
Net credit exposure	$ 7,044	$ 204	$ 7,248

Lending Activities. We manage our lending activities using the credit risk process, measures, limits and risk mitigants described above. Other lending positions, including secondary trading positions, are risk-managed as a component of market risk.

- **Commercial Lending.** Our commercial lending activities include lending to investment-grade and non-investment-grade corporate borrowers. Loans and lending commitments associated with these activities are principally used for operating liquidity and general corporate purposes or in connection with contingent acquisitions. Corporate loans may be secured or unsecured, depending on the loan purpose, the risk profile of the borrower and other factors. Our commercial lending activities also include extending loans to borrowers that are secured by commercial and other real estate.

The table below presents our credit exposure from commercial loans and lending commitments, and the related percentage concentration by industry, region and credit quality.

	As of	
$ in millions	**March 2018**	December 2017
Loans and Lending Commitments	**$204,485**	$198,012
Industry		
Consumer, Retail & Healthcare	**21%**	23%
Diversified Industrials	**15%**	13%
Financial Institutions	**8%**	7%
Funds	**3%**	3%
Natural Resources & Utilities	**13%**	14%
Real Estate	**9%**	12%
Technology, Media & Telecommunications	**20%**	19%
Other (including Special Purpose Vehicles)	**11%**	9%
Total	**100%**	100%
Region		
Americas	**74%**	73%
Europe, Middle East and Africa	**23%**	24%
Asia	**3%**	3%
Total	**100%**	100%
Credit Quality (Credit Rating Equivalent)		
AAA	**2%**	2%
AA	**4%**	4%
A	**20%**	17%
BBB	**29%**	32%
BB or lower	**45%**	45%
Total	**100%**	100%

- **PWM and Retail Lending.** We extend loans and lending commitments to our PWM clients that are primarily secured by residential real estate, securities or other assets. The fair value of the collateral received against such loans and lending commitments generally exceeds their carrying value.

  In addition, we extend unsecured loans to retail clients through Marcus. See Note 9 to the condensed consolidated financial statements for further information about the credit quality indicators of such loans.

  We also have other retail lending exposures, which includes purchased loans and commitments to purchase loans (including distressed loans) and securities. Such loans and securities are primarily backed by residential real estate.

The table below presents our credit exposure from PWM, Marcus and other retail lending, and the related percentage concentration by region.

$ in millions	PWM	Marcus	Other Retail Lending
As of March 2018			
Credit Exposure	**$25,473**	**$2,384**	**$10,733**
Americas	**89%**	**100%**	**80%**
Europe, Middle East and Africa	**6%**	**–%**	**20%**
Asia	**5%**	**–%**	**–%**
Total	**100%**	**100%**	**100%**
As of December 2017			
Credit Exposure	$24,855	$1,912	$10,242
Americas	90%	100%	74%
Europe, Middle East and Africa	5%	–%	26%
Asia	5%	–%	–%
Total	100%	100%	100%

Securities Financing Transactions. We enter into securities financing transactions in order to, among other things, facilitate client activities, invest excess cash, acquire securities to cover short positions and finance certain activities. We bear credit risk related to resale agreements and securities borrowed only to the extent that cash advanced or the value of securities pledged or delivered to the counterparty exceeds the value of the collateral received. We also have credit exposure on repurchase agreements and securities loaned to the extent that the value of securities pledged or delivered to the counterparty for these transactions exceeds the amount of cash or collateral received. Securities collateral obtained for securities financing transactions primarily includes U.S. government and agency obligations and non-U.S. government and agency obligations.

The table below presents our credit exposure from secured financing transactions, and the related percentage concentration by industry, region and credit quality.

	As of	
$ in millions	**March 2018**	December 2017
Secured Financing Transactions	**$27,184**	$29,071
Industry		
Financial Institutions	**34%**	29%
Funds	**31%**	28%
Municipalities & Nonprofit	**5%**	6%
Sovereign	**30%**	36%
Other (including Special Purpose Vehicles)	**–%**	1%
Total	**100%**	100%
Region		
Americas	**30%**	30%
Europe, Middle East and Africa	**46%**	46%
Asia	**24%**	24%
Total	**100%**	100%
Credit Quality (Credit Rating Equivalent)		
AAA	**13%**	12%
AA	**32%**	33%
A	**33%**	35%
BBB	**12%**	10%
BB or lower	**10%**	10%
Total	**100%**	100%

The table above reflects both netting agreements and collateral that management considers when determining credit risk.

Other Credit Exposures. We are exposed to credit risk from our receivables from brokers, dealers and clearing organizations and customers and counterparties. Receivables from brokers, dealers and clearing organizations primarily consist of initial margin placed with clearing organizations and receivables related to sales of securities which have traded, but not yet settled. These receivables generally have minimal credit risk due to the low probability of clearing organization default and the short-term nature of receivables related to securities settlements. Receivables from customers and counterparties generally consist of collateralized receivables related to customer securities transactions and generally have minimal credit risk due to both the value of the collateral received and the short-term nature of these receivables.

The table below presents our other credit exposures, and the related percentage concentration by industry, region and credit quality.

	As of	
$ in millions	March 2018	December 2017
Other Credit Exposures	**$38,767**	$34,323
Industry		
Financial Institutions	**89%**	88%
Funds	**6%**	6%
Natural Resources & Utilities	**1%**	3%
Other (including Special Purpose Vehicles)	**4%**	3%
Total	**100%**	100%
Region		
Americas	**46%**	41%
Europe, Middle East and Africa	**42%**	49%
Asia	**12%**	10%
Total	**100%**	100%
Credit Quality (Credit Rating Equivalent)		
AAA	**3%**	3%
AA	**53%**	51%
A	**27%**	27%
BBB	**6%**	7%
BB or lower	**10%**	12%
Unrated	**1%**	–%
Total	**100%**	100%

The table above reflects collateral that management considers when determining credit risk.

Selected Exposures

We have credit and market exposures, as described below, that have had heightened focus due to recent events and broad market concerns. Credit exposure represents the potential for loss due to the default or deterioration in credit quality of a counterparty or borrower. Market exposure represents the potential for loss in value of our long and short inventory due to changes in market prices.

The debt crisis in Mozambique has resulted in credit rating downgrades and Venezuela has delayed payments on its sovereign debt. Our total credit and market exposure to each of Mozambique and Venezuela as of March 2018 was not material.

We have a comprehensive framework to monitor, measure and assess our country exposures and to determine our risk appetite. We determine the country of risk by the location of the counterparty, issuer or underlier's assets, where they generate revenue, the country in which they are headquartered, the jurisdiction where a claim against them could be enforced, and/or the government whose policies affect their ability to repay their obligations. We monitor our credit exposure to a specific country both at the individual counterparty level, as well as at the aggregate country level.

We use regular stress tests, described above, to calculate the credit exposures, including potential concentrations that would result from applying shocks to counterparty credit ratings or credit risk factors. To supplement these regular stress tests, we also conduct tailored stress tests on an ad hoc basis in response to specific market events that we deem significant. These stress tests are designed to estimate the direct impact of the event on our credit and market exposures resulting from shocks to risk factors including, but not limited to, currency rates, interest rates, and equity prices. We also utilize these stress tests to estimate the indirect impact of certain hypothetical events on our country exposures, such as the impact of credit market deterioration on corporate borrowers and counterparties along with the shocks to the risk factors described above. The parameters of these shocks vary based on the scenario reflected in each stress test. We review estimated losses produced by the stress tests in order to understand their magnitude, highlight potential loss concentrations, and assess and mitigate our exposures where necessary.

See "Stress Tests" above, "Liquidity Risk Management — Liquidity Stress Tests" and "Market Risk Management — Market Risk Management Process — Stress Testing" for further information about stress tests.

Operational Risk Management

Overview

Operational risk is the risk of an adverse outcome resulting from inadequate or failed internal processes, people, systems or from external events. Our exposure to operational risk arises from routine processing errors, as well as extraordinary incidents, such as major systems failures or legal and regulatory matters.

Potential types of loss events related to internal and external operational risk include:

- Clients, products and business practices;
- Execution, delivery and process management;
- Business disruption and system failures;
- Employment practices and workplace safety;
- Damage to physical assets;
- Internal fraud; and
- External fraud.

We maintain a comprehensive control framework designed to provide a well-controlled environment to minimize operational risks. The Firmwide Conduct and Operational Risk Committee is globally responsible for the ongoing approval and monitoring of the frameworks, policies, parameters and limits which govern our operational risks. Operational Risk Management is a risk management function independent of our revenue-producing units, reports to our chief risk officer, and is responsible for developing and implementing policies, methodologies and a formalized framework for operational risk management with the goal of maintaining our exposure to operational risk at levels that are within our risk appetite.

Operational Risk Management Process

Managing operational risk requires timely and accurate information, as well as a strong control culture. We seek to manage our operational risk through:

- Training, supervision and development of our people;
- Active participation of senior management in identifying and mitigating our key operational risks;
- Independent control and support functions that monitor operational risk on a daily basis, and implementation of extensive policies and procedures, and controls designed to prevent the occurrence of operational risk events;
- Proactive communication between our revenue-producing units and our independent control and support functions; and
- A network of systems to facilitate the collection of data used to analyze and assess our operational risk exposure.

We combine top-down and bottom-up approaches to manage and measure operational risk. From a top-down perspective, our senior management assesses firmwide and business-level operational risk profiles. From a bottom-up perspective, revenue-producing units and independent control and support functions are responsible for risk identification and risk management on a day-to-day basis, including escalating operational risks to senior management.

Our operational risk management framework is in part designed to comply with the operational risk measurement rules under the Capital Framework and has evolved based on the changing needs of our businesses and regulatory guidance.

Our operational risk management framework consists of the following practices:

- Risk identification and assessment;
- Risk measurement; and
- Risk monitoring and reporting.

Risk Identification and Assessment

The core of our operational risk management framework is risk identification and assessment. We have a comprehensive data collection process, including firmwide policies and procedures, for operational risk events.

We have established policies that require our revenue-producing units and our independent control and support functions to report and escalate operational risk events. When operational risk events are identified, our policies require that the events be documented and analyzed to determine whether changes are required in our systems and/or processes to further mitigate the risk of future events.

In addition, our systems capture internal operational risk event data, key metrics such as transaction volumes, and statistical information such as performance trends. We use an internally developed operational risk management application to aggregate and organize this information. One of our key risk identification and assessment tools is an operational risk and control self-assessment process, which is performed by managers from both revenue-producing units and independent control and support functions. This process consists of the identification and rating of operational risks, on a forward-looking basis, and the related controls. The results from this process are analyzed to evaluate operational risk exposures and identify businesses, activities or products with heightened levels of operational risk.

Risk Measurement

We measure our operational risk exposure over a twelve-month time horizon using both statistical modeling and scenario analyses, which involve qualitative and quantitative assessments of internal and external operational risk event data and internal control factors for each of our businesses. Operational risk measurement also incorporates an assessment of business environment factors including but not limited to:

- Evaluations of the complexity of our business activities;
- The degree of automation in our processes;
- New activity information;
- The legal and regulatory environment; and
- Changes in the markets for our products and services, including the diversity and sophistication of our customers and counterparties.

The results from these scenario analyses are used to monitor changes in operational risk and to determine business lines that may have heightened exposure to operational risk. These analyses ultimately are used in the determination of the appropriate level of operational risk capital to hold.

Risk Monitoring and Reporting

We evaluate changes in our operational risk profile and our businesses, including changes in business mix or jurisdictions in which we operate, by monitoring the factors noted above at a firmwide level. We have both preventive and detective internal controls, which are designed to reduce the frequency and severity of operational risk losses and the probability of operational risk events. We monitor the results of assessments and independent internal audits of these internal controls.

We have established limits and thresholds consistent with our risk appetite statement, as well as escalation protocols. We provide periodic operational risk reports, which include instances that breach escalation thresholds, to senior management, risk committees and the Risk Committee of the Board.

Model Review and Validation

The statistical models utilized by Operational Risk Management are subject to independent review and validation by Model Risk Management. See "Model Risk Management" for further information about the review and validation of these models.

Model Risk Management

Overview

Model risk is the potential for adverse consequences from decisions made based on model outputs that may be incorrect or used inappropriately. We rely on quantitative models across our business activities primarily to value certain financial assets and financial liabilities, to monitor and manage our risk, and to measure and monitor our regulatory capital.

Our model risk management framework is managed through a governance structure and risk management controls, which encompass standards designed to ensure we maintain a comprehensive model inventory, including risk assessment and classification, sound model development practices, independent review and model-specific usage controls. The Firmwide Model Risk Control Committee oversees our model risk management framework. Model Risk Management, which is independent of model developers, model owners and model users, reports to our chief risk officer, is responsible for identifying and reporting significant risks associated with models, and provides periodic updates to senior management, risk committees and the Risk Committee of the Board.

Model Review and Validation

Model Risk Management consists of quantitative professionals who perform an independent review, validation and approval of our models. This review includes an analysis of the model documentation, independent testing, an assessment of the appropriateness of the methodology used, and verification of compliance with model development and implementation standards. Model Risk Management reviews all existing models on an annual basis, and approves new models or significant changes to models prior to implementation.

The model validation process incorporates a review of models and trade and risk parameters across a broad range of scenarios (including extreme conditions) in order to critically evaluate and verify:

- The model's conceptual soundness, including the reasonableness of model assumptions, and suitability for intended use;
- The testing strategy utilized by the model developers to ensure that the models function as intended;
- The suitability of the calculation techniques incorporated in the model;
- The model's accuracy in reflecting the characteristics of the related product and its significant risks;
- The model's consistency with models for similar products; and
- The model's sensitivity to input parameters and assumptions.

See "Critical Accounting Policies — Fair Value — Review of Valuation Models," "Liquidity Risk Management," "Market Risk Management," "Credit Risk Management" and "Operational Risk Management" for further information about our use of models within these areas.

Available Information

Our internet address is www.gs.com and the investor relations section of our website is located at www.gs.com/shareholders. We make available free of charge through the investor relations section of our website, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934 (Exchange Act), as well as proxy statements, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Also posted on our website, and available in print upon request of any shareholder to our Investor Relations Department, are our certificate of incorporation and by-laws, charters for our Audit Committee, Risk Committee, Compensation Committee, Corporate Governance and Nominating Committee, and Public Responsibilities Committee, our Policy Regarding Director Independence Determinations, our Policy on Reporting of Concerns Regarding Accounting and Other Matters, our Corporate Governance Guidelines and our Code of Business Conduct and Ethics governing our directors, officers and employees. Within the time period required by the SEC, we will post on our website any amendment to the Code of Business Conduct and Ethics and any waiver applicable to any executive officer, director or senior financial officer.

In addition, our website includes information concerning:

- Purchases and sales of our equity securities by our executive officers and directors;
- Disclosure relating to certain non-GAAP financial measures (as defined in the SEC's Regulation G) that we may make public orally, telephonically, by webcast, by broadcast or by other means from time to time;
- DFAST results;
- The public portion of our resolution plan submission;
- Our risk management practices and regulatory capital ratios, as required under the disclosure-related provisions of the Capital Framework, which are based on the third pillar of Basel III; and
- Our quarterly average LCR.

Our Investor Relations Department can be contacted at The Goldman Sachs Group, Inc., 200 West Street, 29th Floor, New York, New York 10282, Attn: Investor Relations, telephone: 212-902-0300, e-mail: gs-investor-relations@gs.com.

From time to time, we use our website, our Twitter account (twitter.com/GoldmanSachs) and other social media channels as additional means of disclosing public information to investors, the media and others interested in Goldman Sachs. It is possible that certain information we post on our website and on social media could be deemed to be material information, and we encourage investors, the media and others interested in Goldman Sachs to review the business and financial information we post on our website and on the social media channels identified above. The information on our website and our social media channels is not incorporated by reference into this Form 10-Q.

Cautionary Statement Pursuant to the U.S. Private Securities Litigation Reform Act of 1995

We have included or incorporated by reference in this Form 10-Q, and from time to time our management may make, statements that may constitute "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control.

These statements include statements other than historical information or statements of current conditions and may relate to our future plans and objectives and results, among other things, and may also include statements about the effect of changes to the capital, leverage, liquidity, long-term debt and TLAC rules applicable to banks and BHCs, the impact of the Dodd-Frank Act on our businesses and operations, and various legal proceedings, governmental investigations or mortgage-related contingencies as set forth in Notes 27 and 18, respectively, to the condensed consolidated financial statements, as well as statements about the results of our Dodd-Frank Act and firm stress tests, statements about the objectives and effectiveness of our business continuity plan, information security program, risk management and liquidity policies, statements about our resolution plan and resolution strategy and their implications for our debtholders and other stakeholders, statements about the design and effectiveness of our resolution capital and liquidity models and our triggers and alerts framework, statements about trends in or growth opportunities for our businesses, statements about our future status, activities or reporting under U.S. or non-U.S. banking and financial regulation, statements about our investment banking transaction backlog, statements about the estimated effects of Tax Legislation, statements about our average LCR and statements about the level of capital actions.

By identifying these statements for you in this manner, we are alerting you to the possibility that our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Important factors that could cause our actual results and financial condition to differ from those indicated in these forward-looking statements include, among others, those described below and in "Risk Factors" in Part I, Item 1A of the 2017 Form 10-K.

Statements about our investment banking transaction backlog are subject to the risk that the terms of these transactions may be modified or that they may not be completed at all; therefore, the net revenues, if any, that we actually earn from these transactions may differ, possibly materially, from those currently expected. Important factors that could result in a modification of the terms of a transaction or a transaction not being completed include, in the case of underwriting transactions, a decline or continued weakness in general economic conditions, outbreak of hostilities, volatility in the securities markets generally or an adverse development with respect to the issuer of the securities and, in the case of financial advisory transactions, a decline in the securities markets, an inability to obtain adequate financing, an adverse development with respect to a party to the transaction or a failure to obtain a required regulatory approval. For information about other important factors that could adversely affect our investment banking transactions, see "Risk Factors" in Part I, Item 1A of the 2017 Form 10-K.

Statements about the estimated effects of Tax Legislation are based on our current calculations, as well as our current interpretations, assumptions and expectations relating to Tax Legislation, which are subject to further guidance and change. The impact of Tax Legislation may differ from our estimates, possibly materially, due to, among other things, (i) refinement of our calculations based on updated information, (ii) changes in interpretations and assumptions, (iii) guidance that may be issued and (iv) actions we may take as a result of Tax Legislation.

We have provided in this filing information regarding our liquidity ratios, including our NSFR. The statements with respect to these ratios are forward-looking statements, based on our current interpretation, expectations and understandings of the relevant regulatory rules, guidance and proposals, and reflect significant assumptions concerning the treatment of various assets and liabilities and the manner in which the ratios are calculated. As a result, the methods used to calculate these ratios may differ, possibly materially, from those used in calculating our liquidity ratios for any future disclosures. The ultimate methods of calculating the ratios will depend on, among other things, implementation guidance or further rulemaking from the U.S. federal bank regulatory agencies and the development of market practices and standards.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Quantitative and qualitative disclosures about market risk are set forth in "Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management" in Part I, Item 2 of this Form 10-Q.

Item 4. Controls and Procedures

As of the end of the period covered by this report, an evaluation was carried out by our management, with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of the end of the period covered by this report. In addition, no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) occurred during the quarter ended March 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of our businesses. Many of these proceedings are in early stages, and many of these cases seek an indeterminate amount of damages. However, we believe, based on currently available information, that the results of such proceedings, in the aggregate, will not have a material adverse effect on our financial condition, but may be material to our operating results in a given period. Given the range of litigation and investigations presently under way, our litigation expenses can be expected to remain high. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Use of Estimates" in Part I, Item 2 of this Form 10-Q. See Notes 18 and 27 to the condensed consolidated financial statements in Part I, Item 1 of this Form 10-Q for information about certain judicial, regulatory and legal proceedings.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The table below presents purchases made by or on behalf of Group Inc. or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Exchange Act) of our common stock during the three months ended March 2018.

	Total Shares Purchased	Average Price Paid Per Share	Total Shares Purchased as Part of a Publicly Announced Program	Maximum Shares That May Yet Be Purchased Under the Program
January 2018	**464,364**	**$263.21**	**463,244**	**47,163,186**
February 2018	**1,108,976**	**$263.07**	**1,108,976**	**46,054,210**
March 2018	**1,454,404**	**$265.63**	**1,454,404**	**44,599,806**
Total	**3,027,744**		**3,026,624**	

In the table above, total shares purchased during January 2018 included 1,120 shares remitted to satisfy minimum statutory withholding taxes on the delivery of equity-based awards.

Since March 2000, our Board has approved a repurchase program authorizing repurchases of up to 555 million shares of our common stock. The repurchase program is effected primarily through regular open-market purchases (which may include repurchase plans designed to comply with Rule 10b5-1), the amounts and timing of which are determined primarily by our current and projected capital position, but which may also be influenced by general market conditions and the prevailing price and trading volumes of our common stock. The repurchase program has no set expiration or termination date. Prior to repurchasing common stock, we must receive confirmation that the FRB does not object to such capital action.

Item 6. Exhibits

Exhibits

12.1	Statement re: Computation of Ratios of Earnings to Fixed Charges and Ratios of Earnings to Combined Fixed Charges and Preferred Stock Dividends.
15.1	Letter re: Unaudited Interim Financial Information.
31.1	Rule 13a-14(a) Certifications.
32.1	Section 1350 Certifications (This information is furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934).
101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Condensed Consolidated Statements of Earnings for the three months ended March 31, 2018 and March 31, 2017, (ii) the Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2018 and March 31, 2017, (iii) the Condensed Consolidated Statements of Financial Condition as of March 31, 2018 and December 31, 2017, (iv) the Condensed Consolidated Statements of Changes in Shareholders' Equity for the three months ended March 31, 2018 and year ended December 31, 2017, (v) the Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2018 and March 31, 2017, and (vi) the notes to the Condensed Consolidated Financial Statements.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

THE GOLDMAN SACHS GROUP, INC.

By:	/s/ R. Martin Chavez
Name:	R. Martin Chavez
Title:	Chief Financial Officer
Date:	May 3, 2018

By:	/s/ Brian J. Lee
Name:	Brian J. Lee
Title:	Principal Accounting Officer
Date:	May 3, 2018

EXHIBIT 12.1

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

COMPUTATION OF RATIOS OF EARNINGS TO FIXED CHARGES AND RATIOS OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

	Three Months Ended March	Year Ended December				
$ in millions	**2018**	2017	2016	2015	2014	2013
Net earnings	**$2,832**	$ 4,286	$ 7,398	$ 6,083	$ 8,477	$ 8,040
Add:						
Provision for taxes	**587**	6,846	2,906	2,695	3,880	3,697
Portion of rents representative of an interest factor	**24**	91	81	83	103	108
Interest expense on all indebtedness	**3,312**	10,181	7,104	5,388	5,557	6,668
Pre-tax earnings, as adjusted	**$6,755**	$21,404	$17,489	$14,249	$18,017	$18,513
Fixed charges [1]:						
Portion of rents representative of an interest factor	**$ 24**	$ 91	$ 81	$ 83	$ 103	$ 108
Interest expense on all indebtedness	**3,326**	10,229	7,127	5,403	5,569	6,672
Total fixed charges	**$3,350**	$10,320	$ 7,208	$ 5,486	$ 5,672	$ 6,780
Preferred stock dividend requirements	**115**	1,561	804	743	583	458
Total combined fixed charges and preferred stock dividends	**$3,465**	$11,881	$ 8,012	$ 6,229	$ 6,255	$ 7,238
Ratio of earnings to fixed charges	**2.02x**	2.07x	2.43x	2.60x	3.18x	2.73x
Ratio of earnings to combined fixed charges and preferred stock dividends	**1.95x**	1.80x	2.18x	2.29x	2.88x	2.56x

1. Fixed charges include capitalized interest of $14 million for the three months ended March 2018, $48 million for 2017, $23 million for 2016, $15 million for 2015, $12 million for 2014 and $4 million for 2013.

EXHIBIT 15.1

May 3, 2018

Securities and Exchange Commission
100 F Street N.E.
Washington, D.C. 20549

Re: The Goldman Sachs Group, Inc.
Registration Statements on Form S-8
(No. 333-80839)
(No. 333-42068)
(No. 333-106430)
(No. 333-120802)

Registration Statements on Form S-3
(No. 333-219206)

Commissioners:

We are aware that our report dated May 3, 2018, on our review of the condensed consolidated statement of financial condition of The Goldman Sachs Group, Inc. and subsidiaries (the "Company") as of March 31, 2018, the related condensed consolidated statements of earnings for the three months ended March 31, 2018 and 2017, the condensed consolidated statements of comprehensive income for the three months ended March 31, 2018 and 2017, the condensed consolidated statement of changes in shareholders' equity for the three months ended March 31, 2018, and the condensed consolidated statements of cash flows for the three months ended March 31, 2018 and 2017 included in the Company's quarterly report on Form 10-Q for the quarter ended March 31, 2018, is incorporated by reference in the registration statements referred to above. Pursuant to Rule 436(c) under the Securities Act of 1933 (the "Act"), such report should not be considered a part of such registration statements, and is not a report within the meaning of Sections 7 and 11 of the Act.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

EXHIBIT 31.1

CERTIFICATIONS

I, Lloyd C. Blankfein, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 of The Goldman Sachs Group, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2018

/s/ Lloyd C. Blankfein

Name: Lloyd C. Blankfein
Title: Chief Executive Officer

CERTIFICATIONS

I, R. Martin Chavez, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 of The Goldman Sachs Group, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2018

/s/ R. Martin Chavez

Name: R. Martin Chavez
Title: Chief Financial Officer

EXHIBIT 32.1

Certification

Pursuant to 18 U.S.C. § 1350, the undersigned officer of The Goldman Sachs Group, Inc. (the "Company") hereby certifies that the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 3, 2018

/s/ Lloyd C. Blankfein

Name: Lloyd C. Blankfein
Title: Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

Certification

Pursuant to 18 U.S.C. § 1350, the undersigned officer of The Goldman Sachs Group, Inc. (the "Company") hereby certifies that the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 3, 2018

/s/ R. Martin Chavez

Name: R. Martin Chavez
Title: Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.