

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 September 30, 2019

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
(State or other jurisdiction of
incorporation or organization)

13-4019460
(I.R.S. Employer
Identification No.)

200 West Street, New York, N.Y.
(Address of principal executive offices)

10282
(Zip Code)

(212) 902-1000

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Exchange on which registered
Common stock, par value \$.01 per share	GS	NYSE
Depositary Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate Non-Cumulative Preferred Stock, Series A	GS PrA	NYSE
Depositary Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate Non-Cumulative Preferred Stock, Series C	GS PrC	NYSE
Depositary Shares, Each Representing 1/1,000th Interest in a Share of Floating Rate Non-Cumulative Preferred Stock, Series D	GS PrD	NYSE
Depositary Shares, Each Representing 1/1,000th Interest in a Share of 5.50% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series J	GS PrJ	NYSE
Depositary Shares, Each Representing 1/1,000th Interest in a Share of 6.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K	GS PrK	NYSE
Depositary Shares, Each Representing 1/1,000th Interest in a Share of 6.30% Non-Cumulative Preferred Stock, Series N	GS PrN	NYSE
5.793% Fixed-to-Floating Rate Normal Automatic Preferred Enhanced Capital Securities of Goldman Sachs Capital II	GS/43PE	NYSE
Floating Rate Normal Automatic Preferred Enhanced Capital Securities of Goldman Sachs Capital III	GS/43PF	NYSE
Medium-Term Notes, Series A, Index-Linked Notes due 2037 of GS Finance Corp.	GCE	NYSE Arca
Medium-Term Notes, Series B, Index-Linked Notes due 2037	GSC	NYSE Arca
Medium-Term Notes, Series E, Index-Linked Notes due 2028 of GS Finance Corp.	FRLG	NYSE Arca

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes 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 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

As of October 18, 2019, there were 354,087,045 shares of the registrant's common stock outstanding.

INDEX

Form 10-Q Item Number	Page No.		Page No.
PART I		Report of Independent Registered Public Accounting Firm	
FINANCIAL INFORMATION		85	
Item 1		Statistical Disclosures	
Financial Statements (Unaudited)		86	
Consolidated Statements of Earnings	1	Item 2	
Consolidated Statements of Comprehensive Income	1	Management's Discussion and Analysis of Financial Condition and Results of Operations	
Consolidated Statements of Financial Condition	2	Introduction	
Consolidated Statements of Changes in Shareholders' Equity	3	Executive Overview	
Consolidated Statements of Cash Flows	4	Business Environment	
Notes to Consolidated Financial Statements	5	Critical Accounting Policies	
Note 1. Description of Business	5	Recent Accounting Developments	
Note 2. Basis of Presentation	5	Use of Estimates	
Note 3. Significant Accounting Policies	6	Results of Operations	
Note 4. Financial Instruments Owned and Financial Instruments Sold, But Not Yet Purchased	12	Balance Sheet and Funding Sources	
Note 5. Fair Value Measurements	13	Equity Capital Management and Regulatory Capital	
Note 6. Cash Instruments	14	Regulatory Matters and Other Developments	
Note 7. Derivatives and Hedging Activities	20	Off-Balance-Sheet Arrangements and Contractual Obligations	
Note 8. Fair Value Option	32	Risk Management	
Note 9. Loans Receivable	38	Overview and Structure of Risk Management	
Note 10. Collateralized Agreements and Financings	42	Liquidity Risk Management	
Note 11. Securitization Activities	45	Market Risk Management	
Note 12. Variable Interest Entities	47	Credit Risk Management	
Note 13. Other Assets	50	Operational Risk Management	
Note 14. Deposits	53	Model Risk Management	
Note 15. Short-Term Borrowings	54	Available Information	
Note 16. Long-Term Borrowings	55	Cautionary Statement Pursuant to the U.S. Private Securities Litigation Reform Act of 1995	
Note 17. Other Liabilities	57	144	
Note 18. Commitments, Contingencies and Guarantees	58	Item 3	
Note 19. Shareholders' Equity	62	Quantitative and Qualitative Disclosures About Market Risk	
Note 20. Regulation and Capital Adequacy	65	146	
Note 21. Earnings Per Common Share	72	Item 4	
Note 22. Transactions with Affiliated Funds	72	Controls and Procedures	
Note 23. Interest Income and Interest Expense	73	146	
Note 24. Income Taxes	73	PART II	
Note 25. Business Segments	74	OTHER INFORMATION	
Note 26. Credit Concentrations	76	146	
Note 27. Legal Proceedings	76	Item 1	
		Legal Proceedings	
		146	
		Item 2	
		Unregistered Sales of Equity Securities and Use of Proceeds	
		146	
		Item 5	
		Other Information	
		146	
		Item 6	
		Exhibits	
		147	
		SIGNATURES	
		147	

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES

Consolidated Statements of Earnings (Unaudited)

<i>in millions, except per share amounts</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Revenues				
Investment banking	\$1,687	\$1,980	\$ 5,360	\$ 5,818
Investment management	1,556	1,580	4,469	4,947
Commissions and fees	758	704	2,308	2,361
Market making	2,384	2,281	7,346	8,031
Other principal transactions	930	1,419	3,811	4,603
Total non-interest revenues	7,315	7,964	23,294	25,760
Interest income	5,459	5,061	16,816	14,211
Interest expense	4,451	4,205	13,519	11,435
Net interest income	1,008	856	3,297	2,776
Total net revenues	8,323	8,820	26,591	28,536
Provision for credit losses	291	174	729	452
Operating expenses				
Compensation and benefits	2,731	3,019	9,307	10,471
Brokerage, clearing, exchange and distribution fees	853	714	2,438	2,370
Market development	169	167	539	532
Communications and technology	283	250	859	761
Depreciation and amortization	473	317	1,240	951
Occupancy	252	203	711	594
Professional fees	350	310	950	897
Other expenses	505	588	1,556	1,735
Total operating expenses	5,616	5,568	17,600	18,311
Pre-tax earnings	2,416	3,078	8,262	9,773
Provision for taxes	539	554	1,713	1,852
Net earnings	1,877	2,524	6,549	7,921
Preferred stock dividends	84	71	376	383
Net earnings applicable to common shareholders	\$1,793	\$2,453	\$ 6,173	\$ 7,538
Earnings per common share				
Basic	\$ 4.83	\$ 6.35	\$ 16.43	\$ 19.42
Diluted	\$ 4.79	\$ 6.28	\$ 16.32	\$ 19.21
Average common shares				
Basic	370.0	385.4	374.7	387.4
Diluted	374.3	390.5	378.2	392.3

Consolidated Statements of Comprehensive Income (Unaudited)

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Net earnings	\$1,877	\$2,524	\$ 6,549	\$ 7,921
Other comprehensive income/(loss) adjustments, net of tax:				
Currency translation	(9)	(3)	2	(3)
Debt valuation adjustment	278	(787)	(1,450)	361
Pension and postretirement liabilities	(5)	(1)	(14)	(6)
Available-for-sale securities	67	(90)	285	(311)
Other comprehensive income/(loss)	331	(881)	(1,177)	41
Comprehensive income	\$2,208	\$1,643	\$ 5,372	\$ 7,962

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

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Consolidated Statements of Financial Condition
(Unaudited)

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Assets		
Cash and cash equivalents	\$ 94,094	\$130,547
Collateralized agreements:		
Securities purchased under agreements to resell (includes \$138,299 and \$139,220 at fair value)	138,299	139,258
Securities borrowed (includes \$30,003 and \$23,142 at fair value)	140,369	135,285
Receivables:		
Loans receivable	85,837	80,590
Customer and other receivables (includes \$1,677 and \$3,189 at fair value)	83,092	79,315
Financial instruments owned (at fair value and includes \$71,561 and \$55,081 pledged as collateral)	424,989	336,161
Other assets	40,640	30,640
Total assets	\$1,007,320	\$931,796
Liabilities and shareholders' equity		
Deposits (includes \$21,570 and \$21,060 at fair value)	\$ 182,702	\$158,257
Collateralized financings:		
Securities sold under agreements to repurchase (at fair value)	109,438	78,723
Securities loaned (includes \$2,622 and \$3,241 at fair value)	13,257	11,808
Other secured financings (includes \$16,084 and \$20,904 at fair value)	17,097	21,433
Customer and other payables	188,161	180,235
Financial instruments sold, but not yet purchased (at fair value)	116,423	108,897
Unsecured short-term borrowings (includes \$22,641 and \$16,963 at fair value)	51,958	40,502
Unsecured long-term borrowings (includes \$47,047 and \$46,584 at fair value)	216,878	224,149
Other liabilities (includes \$204 and \$132 at fair value)	19,394	17,607
Total liabilities	915,308	841,611
Commitments, contingencies and guarantees		
Shareholders' equity		
Preferred stock; aggregate liquidation preference of \$11,203 and \$11,203	11,203	11,203
Common stock; 896,762,705 and 891,356,284 shares issued, and 357,509,026 and 367,741,973 shares outstanding	9	9
Share-based awards	3,052	2,845
Nonvoting common stock; no shares issued and outstanding	—	—
Additional paid-in capital	54,879	54,005
Retained earnings	105,194	100,100
Accumulated other comprehensive income/(loss)	(484)	693
Stock held in treasury, at cost; 539,253,681 and 523,614,313 shares	(81,841)	(78,670)
Total shareholders' equity	92,012	90,185
Total liabilities and shareholders' equity	\$1,007,320	\$931,796

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

Consolidated Statements of Changes in Shareholders' Equity (Unaudited)

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Preferred stock				
Beginning balance	\$ 11,203	\$ 11,203	\$ 11,203	\$ 11,853
Issued	–	–	500	–
Redeemed	–	–	(500)	(650)
Ending balance	11,203	11,203	11,203	11,203
Common stock				
Beginning balance	9	9	9	9
Ending balance	9	9	9	9
Share-based awards				
Beginning balance	2,930	2,581	2,845	2,777
Issuance and amortization of share-based awards	181	179	1,888	1,170
Delivery of common stock underlying share-based awards	(20)	(22)	(1,617)	(1,170)
Forfeiture of share-based awards	(39)	(20)	(64)	(49)
Exercise of share-based awards	–	(2)	–	(12)
Ending balance	3,052	2,716	3,052	2,716
Additional paid-in capital				
Beginning balance	54,865	54,000	54,005	53,357
Delivery of common stock underlying share-based awards	22	28	1,610	1,705
Cancellation of share-based awards in satisfaction of withholding tax requirements	(8)	(16)	(739)	(1,065)
Preferred stock issuance costs, net of reversals upon redemption	–	–	3	15
Ending balance	54,879	54,012	54,879	54,012
Retained earnings				
Beginning balance, as previously reported	103,867	95,941	100,100	91,519
Cumulative effect of change in accounting principle for:				
Leases, net of tax	–	–	12	–
Revenue recognition from contracts with clients, net of tax	–	–	–	(53)
Beginning balance, adjusted	103,867	95,941	100,112	91,466
Net earnings	1,877	2,524	6,549	7,921
Dividends and dividend equivalents declared on common stock and share-based awards	(466)	(311)	(1,091)	(921)
Dividends declared on preferred stock	(84)	(71)	(369)	(368)
Preferred stock redemption premium	–	–	(7)	(15)
Ending balance	105,194	98,083	105,194	98,083
Accumulated other comprehensive income/(loss)				
Beginning balance	(815)	(958)	693	(1,880)
Other comprehensive income/(loss)	331	(881)	(1,177)	41
Ending balance	(484)	(1,839)	(484)	(1,839)
Stock held in treasury, at cost				
Beginning balance	(81,167)	(76,177)	(78,670)	(75,392)
Repurchased	(673)	(1,244)	(3,173)	(2,044)
Reissued	1	–	12	16
Other	(2)	(1)	(10)	(2)
Ending balance	(81,841)	(77,422)	(81,841)	(77,422)
Total shareholders' equity	\$ 92,012	\$ 86,762	\$ 92,012	\$ 86,762

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

Consolidated Statements of Cash Flows (Unaudited)

<i>\$ in millions</i>	Nine Months Ended September	
	2019	2018
Cash flows from operating activities		
Net earnings	\$ 6,549	\$ 7,921
Adjustments to reconcile net earnings to net cash provided by/(used for) operating activities:		
Depreciation and amortization	1,240	951
Share-based compensation	1,852	1,671
Gain related to extinguishment of unsecured borrowings	–	(160)
Provision for credit losses	729	452
Changes in operating assets and liabilities:		
Customer and other receivables and payables, net	3,739	13,043
Collateralized transactions (excluding other secured financings), net	28,039	15,942
Financial instruments owned (excluding available-for-sale securities)	(72,850)	(36,747)
Financial instruments sold, but not yet purchased	7,588	857
Other, net	(4,369)	(1,610)
Net cash provided by/(used for) operating activities	(27,483)	2,320
Cash flows from investing activities		
Purchase of property, leasehold improvements and equipment	(6,397)	(5,947)
Proceeds from sales of property, leasehold improvements and equipment	4,561	2,486
Net cash used for business acquisitions	(803)	(146)
Purchase of investments	(19,541)	(3,224)
Proceeds from sales and paydowns of investments	8,276	361
Loans receivable, net	(5,492)	(10,365)
Net cash used for investing activities	(19,396)	(16,835)
Cash flows from financing activities		
Unsecured short-term borrowings, net	1,137	3,638
Other secured financings (short-term), net	(2,705)	3,831
Proceeds from issuance of other secured financings (long-term)	5,095	3,897
Repayment of other secured financings (long-term), including the current portion	(6,431)	(6,761)
Purchase of Trust Preferred securities	(61)	(35)
Proceeds from issuance of unsecured long-term borrowings	18,613	40,603
Repayment of unsecured long-term borrowings, including the current portion	(26,887)	(30,655)
Derivative contracts with a financing element, net	2,710	938
Deposits, net	23,931	12,914
Preferred stock redemption	(500)	(650)
Proceeds from issuance of preferred stock, net of issuance costs	499	–
Common stock repurchased	(3,173)	(2,044)
Settlement of share-based awards in satisfaction of withholding tax requirements	(741)	(1,065)
Dividends and dividend equivalents paid on common stock, preferred stock and share-based awards	(1,460)	(1,289)
Proceeds from issuance of common stock, including exercise of share-based awards	–	13
Other financing, net	399	–
Net cash provided by financing activities	10,426	23,335
Net increase/(decrease) in cash and cash equivalents	(36,453)	8,820
Cash and cash equivalents, beginning balance	130,547	110,051
Cash and cash equivalents, ending balance	\$ 94,094	\$ 118,871
Supplemental disclosures:		
Cash payments for interest, net of capitalized interest	\$ 14,132	\$ 12,125
Cash payments for income taxes, net	\$ 946	\$ 933

See Notes 11, 13 and 16 for information about non-cash activities.

Notes to Consolidated Financial Statements (Unaudited)

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, 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 loans through its digital platform, *Marcus: by Goldman Sachs*, and secured loans through its digital platform, *Goldman Sachs Private Bank Select*.

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 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 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, 2018. References to "the 2018 Form 10-K" are to the firm's Annual Report on Form 10-K for the year ended December 31, 2018. Certain disclosures included in the annual financial statements have been condensed or omitted from these financial statements as they are not required for interim financial statements under U.S. GAAP and the rules of the Securities and Exchange Commission.

These unaudited 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 September 2019, June 2019 and September 2018 refer to the firm's periods ended, or the dates, as the context requires, September 30, 2019, June 30, 2019 and September 30, 2018, respectively. All references to December 2018 refer to the date December 31, 2018. 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.

Notes to Consolidated Financial Statements (Unaudited)

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:

Financial Instruments Owned and Financial Instruments Sold, But Not Yet Purchased	Note 4
Fair Value Measurements	Note 5
Cash Instruments	Note 6
Derivatives and Hedging Activities	Note 7
Fair Value Option	Note 8
Loans Receivable	Note 9
Collateralized Agreements and Financings	Note 10
Securitization Activities	Note 11
Variable Interest Entities	Note 12
Other Assets	Note 13
Deposits	Note 14
Short-Term Borrowings	Note 15
Long-Term Borrowings	Note 16
Other Liabilities	Note 17
Commitments, Contingencies and Guarantees	Note 18
Shareholders' Equity	Note 19
Regulation and Capital Adequacy	Note 20
Earnings Per Common Share	Note 21
Transactions with Affiliated Funds	Note 22
Interest Income and Interest Expense	Note 23
Income Taxes	Note 24
Business Segments	Note 25
Credit Concentrations	Note 26
Legal Proceedings	Note 27

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.

Notes to Consolidated Financial Statements (Unaudited)

Investment Funds. The firm has formed 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 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, the allowance for credit losses on loans receivable and lending commitments held for investment, provisions for losses that may arise from litigation and regulatory proceedings (including governmental investigations), 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. 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.

Revenues from contracts with clients subject to this ASU represent approximately 50% of total non-interest revenues for each of the three and nine months ended September 2019 (including approximately 85% of investment banking revenues, approximately 95% of investment management revenues and all commissions and fees), and approximately 50% of total non-interest revenues for the three months ended September 2018 and approximately 45% for the nine months ended September 2018 (including approximately 80% of investment banking revenues, approximately 95% of investment management revenues and all commissions and fees for each of the three and nine months ended September 2018). Net interest income is not subject to this ASU. See Note 25 for information about 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. 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.

Expenses associated with financial advisory assignments are recognized when incurred and are included in other expenses. Client reimbursements for such expenses are included in investment banking revenues.

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

Expenses associated with underwriting assignments are generally deferred until the related revenue is recognized or the assignment is otherwise concluded. Such expenses are included in other expenses.

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 services are provided.

**Notes to Consolidated Financial Statements
(Unaudited)**

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. Such fees are included in brokerage, clearing, exchange and distribution fees.

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 twelve-month period or over the life of a fund. Fees that are based on performance over a twelve-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.

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.

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. Third-party research costs incurred by the firm in connection with such arrangements are presented net within commissions and 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 such 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 September 2019, substantially all future net revenues associated with such remaining performance obligations will be recognized through 2026. Annual revenues associated with such performance obligations average less than \$250 million through 2026.

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. Cash and cash equivalents included cash and due from banks of \$12.79 billion as of September 2019 and \$10.66 billion as of December 2018. Cash and cash equivalents also included interest-bearing deposits with banks of \$81.30 billion as of September 2019 and \$119.89 billion as of December 2018.

The firm segregates cash for regulatory and other purposes related to client activity. Cash and cash equivalents segregated for regulatory and other purposes were \$23.42 billion as of September 2019 and \$23.14 billion as of December 2018. In addition, the firm segregates securities for regulatory and other purposes related to client activity. See Note 10 for further information about segregated securities.

Customer and Other Receivables

Customer and other receivables included receivables from customers and counterparties of \$55.20 billion as of September 2019 and \$53.81 billion as of December 2018, and receivables from brokers, dealers and clearing organizations of \$27.89 billion as of September 2019 and \$25.50 billion as of December 2018. Such receivables primarily consist of customer margin loans, receivables resulting from unsettled transactions, collateral posted in connection with certain derivative transactions and certain transfers of assets accounted for as secured loans rather than purchases at fair value.

**Notes to Consolidated Financial Statements
(Unaudited)**

Substantially all of these receivables are accounted for at amortized cost net of estimated uncollectible amounts. Certain of the firm's customer and other receivables 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 customer and other receivables accounted for at fair value under the fair value option. In addition, the firm's customer and other receivables included \$4.51 billion as of September 2019 and \$3.83 billion as of December 2018 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 September 2019 and December 2018, the carrying value of receivables not accounted for at fair value generally approximated fair value. As these receivables are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 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 September 2019 and December 2018. Interest on customer and other receivables is recognized over the life of the transaction and included in interest income.

Customer and other receivables includes receivables from contracts with clients and 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. The firm's receivables from contracts with clients were \$2.30 billion as of September 2019 and \$1.94 billion as of December 2018. As of both September 2019 and December 2018 contract assets were not material.

Customer and Other Payables

Customer and other payables included payables to customers and counterparties of \$180.91 billion as of September 2019 and \$173.99 billion as of December 2018, and payables to brokers, dealers and clearing organizations of \$7.25 billion as of September 2019 and \$6.24 billion as of December 2018. Such payables primarily consist of customer credit balances related to the firm's prime brokerage activities. Customer and other payables are accounted for at cost plus accrued interest, which generally approximates fair value. As these payables are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 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 September 2019 and December 2018. Interest on customer and other payables 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 consolidated statements of financial condition when a legal right of setoff exists under an enforceable netting agreement. Securities purchased under agreements to resell (resale agreements) and securities sold under agreements to repurchase (repurchase agreements) and securities borrowed and loaned transactions with the same term and currency are presented on a net-by-counterparty basis in the consolidated statements of financial condition when such transactions meet certain settlement criteria and are subject to netting agreements.

**Notes to Consolidated Financial Statements
(Unaudited)**

In the 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 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 assets and liabilities.

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.

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. The tax effect related to the settlement of share-based awards is recorded in income tax benefit or expense.

Foreign Currency Translation

Assets and liabilities denominated in non-U.S. currencies are translated at rates of exchange prevailing on the date of the 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 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 operating expenses. Costs incurred in connection with certain soft-dollar arrangements, which were presented gross as operating 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).

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 any gain or loss (based on the estimated fair value of the asset at the time of sale) when 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

The firm adopted this ASU in January 2019 under a modified retrospective approach. Upon adoption, in accordance with the ASU, the firm elected to not reassess the lease classification or initial direct costs of existing leases, and to not reassess whether existing contracts contain a lease. In addition, the firm has elected to account for each contract's lease and non-lease components as a single lease component. The impact of adoption was a gross up of \$1.77 billion on the firm's consolidated statements of financial condition and an increase to retained earnings of \$12 million (net of tax) as of January 1, 2019.

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 (Purchased Credit Deteriorated or PCD loans).

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 such 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 PCD loans, an initial allowance would be recorded for expected credit losses and recognized as an increase to the purchase price rather than as an expense. The ASU eliminates the existing accounting guidance for Purchased Credit Impaired (PCI) loans. The ASU also allows for a one-time irrevocable fair value option election on the date of adoption for financial instruments (except held-to-maturity securities) that would otherwise be in the scope of this ASU.

The ASU is effective for the firm in January 2020 under a modified retrospective approach.

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 firm has completed development of credit loss models for significant loan portfolios and continues to test these models, validate data inputs, and refine the policies, systems and controls that will be required to implement CECL. Based on the work completed to date, the current loan portfolio and the weighted average of a range of current forecasts of future economic conditions, the firm estimates that the allowance for credit losses will increase by approximately \$600 million to \$800 million when CECL is adopted. The estimated increase is driven by the fact that the allowance will cover expected credit losses over the full expected life of the loan portfolios and will also take into account forecasts of expected future economic conditions. This increased allowance will not impact the firm's realized losses in these loan portfolios. In addition, to the extent that the firm does not elect the fair value option on certain PCD loans, an allowance will be recorded for such loans with a corresponding increase to their gross carrying value. Ultimately, the extent of the impact of adoption of this ASU on the firm's consolidated financial statements may vary and will depend on, among other things, the economic environment, the completion of the firm's models, policies and other management judgments, and the size and type of loan portfolios held by the firm on the date of adoption.

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 the Tax Cuts and Jobs Act (Tax Legislation) on items within accumulated other comprehensive income to retained earnings.

The firm adopted this ASU in January 2019 and did not elect to reclassify the income tax effects of Tax Legislation from accumulated other comprehensive income to retained earnings. Therefore, the adoption of the ASU did not have an impact on the firm's consolidated financial statements.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 6 for information about cash instruments, Note 7 for information about derivatives, and Note 8 for information about other financial assets and financial liabilities at fair value.

The table below presents financial instruments owned and financial instruments sold, but not yet purchased.

<i>\$ in millions</i>	Financial Instruments Owned	Financial Instruments Sold, But Not Yet Purchased
As of September 2019		
Money market instruments	\$ 3,715	\$ –
Government and agency obligations:		
U.S.	131,500	12,374
Non-U.S.	55,657	23,438
Loans and securities backed by:		
Commercial real estate	3,713	28
Residential real estate	14,717	7
Corporate debt instruments	39,042	8,660
State and municipal obligations	1,233	2
Other debt obligations	1,708	–
Equity securities	116,047	26,193
Commodities	3,553	–
Investments in funds at NAV	4,232	–
Total cash instruments	375,117	70,702
Derivatives	49,872	45,721
Total	\$424,989	\$116,423
As of December 2018		
Money market instruments	\$ 2,635	\$ –
Government and agency obligations:		
U.S.	110,616	5,080
Non-U.S.	43,607	25,347
Loans and securities backed by:		
Commercial real estate	3,369	–
Residential real estate	12,949	1
Corporate debt instruments	31,207	10,411
State and municipal obligations	1,233	–
Other debt obligations	1,864	1
Equity securities	76,170	25,463
Commodities	3,729	–
Investments in funds at NAV	3,936	–
Total cash instruments	291,315	66,303
Derivatives	44,846	42,594
Total	\$336,161	\$108,897

Gains and Losses from Market Making and Other Principal Transactions

The table below presents market making revenues by major product type and other principal transactions revenues.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Interest rates	\$ (683)	\$ 13	\$ 1,236	\$ (2,304)
Credit	245	292	696	1,158
Currencies	2,126	373	3,393	3,868
Equities	767	1,520	1,934	4,681
Commodities	(71)	83	87	628
Market making	2,384	2,281	7,346	8,031
Other principal transactions	930	1,419	3,811	4,603
Total	\$3,314	\$3,700	\$11,157	\$12,634

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.

**Notes to Consolidated Financial Statements
(Unaudited)****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.

<i>\$ in millions</i>	As of		
	September 2019	June 2019	December 2018
Total level 1 financial assets	\$ 238,670	\$196,854	\$170,463
Total level 2 financial assets	396,122	368,056	354,515
Total level 3 financial assets	23,494	22,787	22,181
Investments in funds at NAV	4,232	4,086	3,936
Counterparty and cash collateral netting	(67,550)	(56,747)	(49,383)
Total financial assets at fair value	\$ 594,968	\$535,036	\$501,712
Total assets	\$1,007,320	\$944,903	\$931,796
Total level 3 financial assets divided by:			
Total assets	2.3%	2.4%	2.4%
Total financial assets at fair value	3.9%	4.3%	4.4%
Total level 1 financial liabilities	\$ 59,545	\$ 56,715	\$ 54,151
Total level 2 financial liabilities	299,001	251,854	258,335
Total level 3 financial liabilities	25,778	25,194	23,804
Counterparty and cash collateral netting	(48,295)	(43,395)	(39,786)
Total financial liabilities at fair value	\$ 336,029	\$290,368	\$296,504
Total level 3 financial liabilities divided by			
total financial liabilities at fair value	7.7%	8.7%	8.0%

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.

<i>\$ in millions</i>	As of		
	September 2019	June 2019	December 2018
Cash instruments	\$ 18,386	\$ 18,023	\$ 17,227
Derivatives	5,108	4,762	4,948
Other financial assets	–	2	6
Total	\$ 23,494	\$ 22,787	\$ 22,181

Level 3 financial assets as of September 2019 increased compared with both June 2019 and December 2018, 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).

Notes to Consolidated Financial Statements (Unaudited)

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.

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:

- 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);
- Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral;
- 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).

Notes to Consolidated Financial Statements (Unaudited)

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:

- Market yields implied by transactions of similar or related assets;
- Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral;
- 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. Corporate debt instruments includes corporate loans and debt securities. 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 includes U.S. government and agency obligations, 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.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

Fair Value of Cash Instruments by Level

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

<i>\$ in millions</i>	Level 1	Level 2	Level 3	Total
As of September 2019				
Assets				
Money market instruments	\$ 1,545	\$ 2,170	\$ –	\$ 3,715
Government and agency obligations:				
U.S.	100,276	31,204	20	131,500
Non-U.S.	42,386	13,186	85	55,657
Loans and securities backed by:				
Commercial real estate	–	2,891	822	3,713
Residential real estate	–	14,254	463	14,717
Corporate debt instruments	1,228	33,026	4,788	39,042
State and municipal obligations	–	1,194	39	1,233
Other debt obligations	–	1,067	641	1,708
Equity securities	93,227	11,292	11,528	116,047
Commodities	–	3,553	–	3,553
Subtotal	\$238,662	\$113,837	\$18,386	\$370,885
Investments in funds at NAV				4,232
Total cash instrument assets				\$375,117
Liabilities				
Government and agency obligations:				
U.S.	\$ (12,326)	\$ (48)	\$ –	\$ (12,374)
Non-U.S.	(21,350)	(2,087)	(1)	(23,438)
Loans and securities backed by:				
Commercial real estate	–	(27)	(1)	(28)
Residential real estate	–	(6)	(1)	(7)
Corporate debt instruments	(59)	(8,381)	(220)	(8,660)
State and municipal obligations	–	(2)	–	(2)
Equity securities	(25,796)	(380)	(17)	(26,193)
Total cash instrument liabilities	\$ (59,531)	\$ (10,931)	\$ (240)	\$ (70,702)

As of December 2018

Assets				
Money market instruments	\$ 1,489	\$ 1,146	\$ –	\$ 2,635
Government and agency obligations:				
U.S.	82,264	28,327	25	110,616
Non-U.S.	33,231	10,366	10	43,607
Loans and securities backed by:				
Commercial real estate	–	2,350	1,019	3,369
Residential real estate	–	12,286	663	12,949
Corporate debt instruments	468	26,515	4,224	31,207
State and municipal obligations	–	1,210	23	1,233
Other debt obligations	–	1,326	538	1,864
Equity securities	52,989	12,456	10,725	76,170
Commodities	–	3,729	–	3,729
Subtotal	\$170,441	\$ 99,711	\$17,227	\$287,379
Investments in funds at NAV				3,936
Total cash instrument assets				\$291,315
Liabilities				
Government and agency obligations:				
U.S.	\$ (5,067)	\$ (13)	\$ –	\$ (5,080)
Non-U.S.	(23,872)	(1,475)	–	(25,347)
Loans and securities backed by:				
residential real estate	–	(1)	–	(1)
Corporate debt instruments	(4)	(10,376)	(31)	(10,411)
Other debt obligations	–	(1)	–	(1)
Equity securities	(25,147)	(298)	(18)	(25,463)
Total cash instrument liabilities	\$ (54,090)	\$ (12,164)	\$ (49)	\$ (66,303)

In the table above:

- Cash instrument assets are included in financial instruments owned and cash instrument liabilities are included in financial instruments sold, but not yet purchased.
- 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. Such securities include investments accounted for at fair value under the fair value option where the firm would otherwise apply the equity method of accounting of \$8.02 billion as of September 2019 and \$7.91 billion as of December 2018. As of both September 2019 and December 2018, level 3 equity securities primarily consisted of private equity securities.

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 level 3 cash instruments.

<i>\$ in millions</i>	Level 3 Assets and Range of Significant Unobservable Inputs (Weighted Average) as of	
	September 2019	December 2018
Loans and securities backed by commercial real estate		
Level 3 assets	\$822	\$1,019
Yield	4.1% to 21.7% (10.6%)	6.9% to 22.5% (12.4%)
Recovery rate	5.5% to 89.3% (48.6%)	9.7% to 78.4% (42.9%)
Duration (years)	0.3 to 6.2 (3.3)	0.4 to 7.1 (3.7)
Loans and securities backed by residential real estate		
Level 3 assets	\$463	\$663
Yield	0.9% to 14.0% (8.5%)	2.6% to 19.3% (9.2%)
Cumulative loss rate	2.8% to 47.2% (33.3%)	8.3% to 37.7% (19.2%)
Duration (years)	1.0 to 12.9 (5.3)	1.4 to 14.0 (6.7)
Corporate debt instruments		
Level 3 assets	\$4,788	\$4,224
Yield	1.2% to 29.4% (12.0%)	0.7% to 32.3% (11.9%)
Recovery rate	0.0% to 78.0% (52.6%)	0.0% to 78.0% (57.8%)
Duration (years)	0.6 to 6.0 (3.2)	0.4 to 13.5 (3.4)
Equity securities		
Level 3 assets	\$11,528	\$10,725
Multiples	0.5x to 27.0x (7.6x)	1.0x to 23.6x (8.1x)
Discount rate/yield	6.5% to 22.5% (13.5%)	6.5% to 22.1% (14.3%)
Capitalization rate	3.6% to 15.0% (5.8%)	3.5% to 12.3% (6.1%)
Other cash instruments		
Level 3 assets	\$785	\$596
Yield	3.5% to 16.0% (13.8%)	4.1% to 11.5% (9.2%)
Duration (years)	1.6 to 4.8 (2.9)	2.2 to 4.8 (2.8)

**Notes to Consolidated Financial Statements
(Unaudited)**

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 level 3 cash instruments.
- Increases in yield, discount rate, capitalization rate, duration or cumulative loss rate used in the valuation of level 3 cash instruments would have resulted in a lower fair value measurement, while increases in recovery rate or multiples would have resulted in a higher fair value measurement as of both September 2019 and December 2018. Due to the distinctive nature of each level 3 cash instrument, 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.

Level 3 Rollforward

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

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Total cash instrument assets				
Beginning balance	\$18,023	\$16,216	\$17,227	\$15,395
Net realized gains/(losses)	68	122	224	350
Net unrealized gains/(losses)	5	481	643	585
Purchases	616	581	1,739	1,685
Sales	(360)	(249)	(1,547)	(1,871)
Settlements	(711)	(605)	(1,584)	(1,487)
Transfers into level 3	1,494	1,289	3,234	3,848
Transfers out of level 3	(749)	(1,170)	(1,550)	(1,840)
Ending balance	\$18,386	\$16,665	\$18,386	\$16,665
Total cash instrument liabilities				
Beginning balance	\$ (211)	\$ (53)	\$ (49)	\$ (68)
Net realized gains/(losses)	(2)	-	1	4
Net unrealized gains/(losses)	(72)	(3)	(207)	2
Purchases	15	17	22	26
Sales	(16)	(30)	(19)	(44)
Settlements	12	1	30	17
Transfers into level 3	(4)	(17)	(24)	(9)
Transfers out of level 3	38	19	6	6
Ending balance	\$ (240)	\$ (66)	\$ (240)	\$ (66)

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.
- Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Loans and securities backed by commercial real estate				
Beginning balance	\$ 910	\$ 1,094	\$ 1,019	\$ 1,126
Net realized gains/(losses)	18	16	45	58
Net unrealized gains/(losses)	(34)	4	(38)	(25)
Purchases	3	22	52	105
Sales	(38)	(49)	(133)	(125)
Settlements	(88)	(49)	(261)	(248)
Transfers into level 3	53	44	157	275
Transfers out of level 3	(2)	(125)	(19)	(209)
Ending balance	\$ 822	\$ 957	\$ 822	\$ 957
Loans and securities backed by residential real estate				
Beginning balance	\$ 463	\$ 789	\$ 663	\$ 668
Net realized gains/(losses)	9	12	24	41
Net unrealized gains/(losses)	16	21	39	17
Purchases	36	22	141	84
Sales	(109)	(75)	(233)	(192)
Settlements	(33)	(61)	(107)	(130)
Transfers into level 3	120	17	45	237
Transfers out of level 3	(39)	(73)	(109)	(73)
Ending balance	\$ 463	\$ 652	\$ 463	\$ 652
Corporate debt instruments				
Beginning balance	\$ 4,680	\$ 3,391	\$ 4,224	\$ 3,270
Net realized gains/(losses)	47	52	108	137
Net unrealized gains/(losses)	(31)	25	112	(10)
Purchases	257	278	730	693
Sales	(127)	(65)	(401)	(325)
Settlements	(239)	(281)	(520)	(648)
Transfers into level 3	593	830	928	1,201
Transfers out of level 3	(392)	(341)	(393)	(429)
Ending balance	\$ 4,788	\$ 3,889	\$ 4,788	\$ 3,889
Equity securities				
Beginning balance	\$11,281	\$10,561	\$10,725	\$ 9,904
Net realized gains/(losses)	23	42	55	109
Net unrealized gains/(losses)	116	429	557	591
Purchases	201	226	568	729
Sales	(68)	(46)	(735)	(1,180)
Settlements	(319)	(205)	(571)	(392)
Transfers into level 3	590	393	1,952	2,133
Transfers out of level 3	(296)	(629)	(1,023)	(1,123)
Ending balance	\$11,528	\$10,771	\$11,528	\$10,771
Other cash instruments				
Beginning balance	\$ 689	\$ 381	\$ 596	\$ 427
Net realized gains/(losses)	(29)	-	(8)	5
Net unrealized gains/(losses)	(62)	2	(27)	12
Purchases	119	33	248	74
Sales	(18)	(14)	(45)	(49)
Settlements	(32)	(9)	(125)	(69)
Transfers into level 3	138	5	152	2
Transfers out of level 3	(20)	(2)	(6)	(6)
Ending balance	\$ 785	\$ 396	\$ 785	\$ 396

Level 3 Rollforward Commentary

Three Months Ended September 2019. The net realized and unrealized gains on level 3 cash instrument assets of \$73 million (reflecting \$68 million of net realized gains and \$5 million of net unrealized gains) for the three months ended September 2019 included gains/(losses) of \$(157) million reported in market making, \$139 million reported in other principal transactions and \$91 million reported in interest income.

The drivers of the net unrealized gains on level 3 cash instrument assets for the three months ended September 2019 were not material.

Transfers into level 3 during the three months ended September 2019 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 September 2019 primarily reflected transfers of certain corporate debt instruments and private equity securities to level 2, principally due to increased price transparency as a result of market evidence, including market transactions in these instruments.

Nine Months Ended September 2019. The net realized and unrealized gains on level 3 cash instrument assets of \$867 million (reflecting \$224 million of net realized gains and \$643 million of net unrealized gains) for the nine months ended September 2019 included gains/(losses) of \$(140) million reported in market making, \$743 million reported in other principal transactions and \$264 million reported in interest income.

The net unrealized gains on level 3 cash instrument assets for the nine months ended September 2019 primarily reflected gains on private equity securities, principally driven by corporate performance.

Transfers into level 3 during the nine months ended September 2019 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 nine months ended September 2019 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

Three Months Ended September 2018. The net realized and unrealized gains on level 3 cash instrument assets of \$603 million (reflecting \$122 million of net realized gains and \$481 million of net unrealized gains) for the three months ended September 2018 included gains/(losses) of \$(3) million reported in market making, \$466 million reported in other principal transactions and \$140 million reported in interest income.

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

Transfers into level 3 during the three months ended September 2018 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 September 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.

Nine Months Ended September 2018. The net realized and unrealized gains on level 3 cash instrument assets of \$935 million (reflecting \$350 million of net realized gains and \$585 million of net unrealized gains) for the nine months ended September 2018 included gains/(losses) of \$(48) million reported in market making, \$621 million reported in other principal transactions and \$362 million reported in interest income.

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

Transfers into level 3 during the nine months ended September 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 nine months ended September 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.

Available-for-Sale Securities

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

<i>\$ in millions</i>	Amortized Cost	Fair Value	Weighted Average Yield
As of September 2019			
Less than 5 years	\$14,572	\$14,576	1.59%
Greater than 5 years	4,580	4,802	2.17%
Total	\$19,152	\$19,378	1.73%
As of December 2018			
Less than 5 years	\$ 5,954	\$ 5,879	2.10%
Greater than 5 years	6,231	6,153	2.44%
Total	\$12,185	\$12,032	2.28%

In the table above:

- Available-for-sale securities consists of U.S. government obligations that were classified in level 1 of the fair value hierarchy as of both September 2019 and December 2018.
- The firm sold \$8.08 billion of available-for-sale securities during the nine months ended September 2019. The realized gains on sales of such securities were \$131 million for the nine months ended September 2019, and were included in the consolidated statements of earnings. The sales and realized gains for the year ended December 2018 were not material.
- The gross unrealized gains included in accumulated other comprehensive income/(loss) were \$275 million and the gross unrealized losses included in accumulated other comprehensive income/(loss) were not material as of September 2019. The gross unrealized losses included in accumulated other comprehensive income/(loss) were \$153 million as of December 2018 and were related to securities in a continuous unrealized loss position for greater than a year.
- Available-for-sale securities in an unrealized loss position are periodically reviewed for other-than-temporary impairment. The firm considers various factors, including market conditions, changes in issuer credit ratings, severity and duration of the unrealized losses, and the intent and ability to hold the security until recovery to determine if the securities are other-than-temporarily impaired. There were no such impairments during both the nine months ended September 2019 and September 2018.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 timing of which is uncertain.

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, the timing of which is uncertain.

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 (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, such covered funds.

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

<i>\$ in millions</i>	Fair Value of Investments	Unfunded Commitments
As of September 2019		
Private equity funds	\$2,751	\$ 746
Credit funds	891	831
Hedge funds	136	–
Real estate funds	454	201
Total	\$4,232	\$1,778
As of December 2018		
Private equity funds	\$2,683	\$ 809
Credit funds	548	1,099
Hedge funds	161	–
Real estate funds	544	203
Total	\$3,936	\$2,111

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.

**Notes to Consolidated Financial Statements
(Unaudited)**

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 are included in financial instruments owned and derivative liabilities are included in financial instruments sold, but not yet purchased. Realized and unrealized gains and losses on derivatives not designated as hedges 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 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 September 2019		As of December 2018	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
<i>\$ in millions</i>				
Not accounted for as hedges				
Exchange-traded	\$ 873	\$ 1,381	\$ 760	\$ 1,553
OTC-cleared	14,141	13,047	5,040	3,552
Bilateral OTC	316,126	292,278	227,274	211,091
Total interest rates	331,140	306,706	233,074	216,196
OTC-cleared	6,355	6,530	4,778	4,517
Bilateral OTC	14,640	14,178	14,658	13,784
Total credit	20,995	20,708	19,436	18,301
Exchange-traded	14	13	11	16
OTC-cleared	446	407	656	800
Bilateral OTC	95,382	93,025	85,772	87,953
Total currencies	95,842	93,445	86,439	88,769
Exchange-traded	3,757	3,395	4,445	4,093
OTC-cleared	204	226	433	439
Bilateral OTC	7,986	11,754	12,746	15,595
Total commodities	11,947	15,375	17,624	20,127
Exchange-traded	13,936	14,671	13,431	11,765
Bilateral OTC	32,080	35,693	34,687	40,668
Total equities	46,016	50,364	48,118	52,433
Subtotal	505,940	486,598	404,691	395,826
Accounted for as hedges				
OTC-cleared	2	–	2	–
Bilateral OTC	3,890	–	3,024	7
Total interest rates	3,892	–	3,026	7
OTC-cleared	30	15	25	53
Bilateral OTC	164	7	54	61
Total currencies	194	22	79	114
Subtotal	4,086	22	3,105	121
Total gross fair value	\$ 510,026	\$ 486,620	\$ 407,796	\$ 395,947
Offset in consolidated statements of financial condition				
Exchange-traded	\$ (15,524)	\$ (15,524)	\$ (14,377)	\$ (14,377)
OTC-cleared	(19,497)	(19,497)	(8,888)	(8,888)
Bilateral OTC	(358,411)	(358,411)	(290,961)	(290,961)
Counterparty netting	(393,432)	(393,432)	(314,226)	(314,226)
OTC-cleared	(1,230)	(333)	(1,389)	(164)
Bilateral OTC	(65,492)	(47,134)	(47,335)	(38,963)
Cash collateral netting	(66,722)	(47,467)	(48,724)	(39,127)
Total amounts offset	\$(460,154)	\$(440,899)	\$(362,950)	\$(353,353)
Included in consolidated statements of financial condition				
Exchange-traded	\$ 3,056	\$ 3,936	\$ 4,270	\$ 3,050
OTC-cleared	451	395	657	309
Bilateral OTC	46,365	41,390	39,919	39,235
Total	\$ 49,872	\$ 45,721	\$ 44,846	\$ 42,594
Not offset in consolidated statements of financial condition				
Cash collateral	\$ (1,288)	\$ (1,712)	\$ (614)	\$ (1,328)
Securities collateral	(15,415)	(12,639)	(12,740)	(8,414)
Total	\$ 33,169	\$ 31,370	\$ 31,492	\$ 32,852

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

<i>\$ in millions</i>	Notional Amounts as of	
	September 2019	December 2018
Not accounted for as hedges		
Exchange-traded	\$ 6,116,221	\$ 5,139,159
OTC-cleared	20,158,357	14,290,327
Bilateral OTC	12,470,235	12,858,248
Total interest rates	38,744,813	32,287,734
OTC-cleared	421,052	394,494
Bilateral OTC	750,857	762,653
Total credit	1,171,909	1,157,147
Exchange-traded	5,490	5,599
OTC-cleared	131,956	113,360
Bilateral OTC	7,567,048	6,596,741
Total currencies	7,704,494	6,715,700
Exchange-traded	269,709	259,287
OTC-cleared	1,621	1,516
Bilateral OTC	240,621	244,958
Total commodities	511,951	505,761
Exchange-traded	910,044	635,988
Bilateral OTC	1,148,043	1,070,211
Total equities	2,058,087	1,706,199
Subtotal	50,191,254	42,372,541
Accounted for as hedges		
OTC-cleared	117,810	85,681
Bilateral OTC	10,904	12,022
Total interest rates	128,714	97,703
OTC-cleared	4,322	2,911
Bilateral OTC	7,668	8,089
Total currencies	11,990	11,000
Subtotal	140,704	108,703
Total notional amounts	\$50,331,958	\$42,481,244

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 of \$10.57 billion as of September 2019 and \$10.68 billion as of December 2018, and derivative liabilities of \$14.46 billion as of September 2019 and \$14.58 billion as of December 2018, 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.

Notes to Consolidated Financial Statements (Unaudited)

- **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.

Notes to Consolidated Financial Statements (Unaudited)

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 table below presents the fair value of derivatives on a gross basis by level and product type, as well as the impact of netting.

<i>\$ in millions</i>	Level 1	Level 2	Level 3	Total
As of September 2019				
Assets				
Interest rates	\$ 2	\$ 334,415	\$ 615	\$ 335,032
Credit	–	17,322	3,673	20,995
Currencies	–	95,792	244	96,036
Commodities	–	11,480	467	11,947
Equities	6	45,024	986	46,016
Gross fair value	8	504,033	5,985	510,026
Counterparty netting in levels	–	(391,727)	(877)	(392,604)
Subtotal	\$ 8	\$ 112,306	\$ 5,108	\$ 117,422
Cross-level counterparty netting				(828)
Cash collateral netting				(66,722)
Net fair value				\$ 49,872
Liabilities				
Interest rates	\$ (5)	\$(306,136)	\$ (565)	\$(306,706)
Credit	–	(18,935)	(1,773)	(20,708)
Currencies	–	(93,037)	(430)	(93,467)
Commodities	–	(15,069)	(306)	(15,375)
Equities	(9)	(48,107)	(2,248)	(50,364)
Gross fair value	(14)	(481,284)	(5,322)	(486,620)
Counterparty netting in levels	–	391,727	877	392,604
Subtotal	\$(14)	\$(89,557)	\$(4,445)	\$(94,016)
Cross-level counterparty netting				828
Cash collateral netting				47,467
Net fair value				\$ (45,721)
As of December 2018				
Assets				
Interest rates	\$ 12	\$ 235,680	\$ 408	\$ 236,100
Credit	–	15,992	3,444	19,436
Currencies	–	85,837	681	86,518
Commodities	–	17,193	431	17,624
Equities	10	47,168	940	48,118
Gross fair value	22	401,870	5,904	407,796
Counterparty netting in levels	–	(312,611)	(956)	(313,567)
Subtotal	\$ 22	\$ 89,259	\$ 4,948	\$ 94,229
Cross-level counterparty netting				(659)
Cash collateral netting				(48,724)
Net fair value				\$ 44,846
Liabilities				
Interest rates	\$(24)	\$(215,662)	\$ (517)	\$(216,203)
Credit	–	(16,529)	(1,772)	(18,301)
Currencies	–	(88,663)	(220)	(88,883)
Commodities	–	(19,808)	(319)	(20,127)
Equities	(37)	(49,910)	(2,486)	(52,433)
Gross fair value	(61)	(390,572)	(5,314)	(395,947)
Counterparty netting in levels	–	312,611	956	313,567
Subtotal	\$(61)	\$(77,961)	\$(4,358)	\$(82,380)
Cross-level counterparty netting				659
Cash collateral netting				39,127
Net fair value				\$ (42,594)

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

In the table 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 level 3 derivatives.

<i>\$ in millions, except inputs</i>	Level 3 Assets (Liabilities) and Range of Significant Unobservable Inputs (Average/Median) as of	
	September 2019	December 2018
Interest rates, net	\$50	\$(109)
Correlation	(53)% to 81% (51%/60%)	(10)% to 86% (66%/64%)
Volatility (bps)	31 to 150 (79/76)	31 to 150 (74/65)
Credit, net	\$1,900	\$1,672
Credit spreads (bps)	1 to 559 (89/54)	1 to 810 (109/63)
Upfront credit points	2 to 98 (39/32)	2 to 99 (44/40)
Recovery rates	25% to 60% (36%/38%)	25% to 70% (40%/40%)
Currencies, net	\$(186)	\$461
Correlation	20% to 70% (37%/36%)	10% to 70% (40%/36%)
Commodities, net	\$161	\$112
Volatility	11% to 80% (26%/25%)	10% to 75% (28%/27%)
Natural gas spread	\$(1.93) to \$3.47 \$(0.19)/\$(0.19))	\$(2.32) to \$4.68 \$(0.26)/\$(0.30)
Oil spread	\$(9.05) to \$23.94 (\$4.20)/\$2.72)	\$(3.44) to \$16.62 (\$4.53)/\$3.94)
Equities, net	\$(1,262)	\$(1,546)
Correlation	(70)% to 96% (44%/44%)	(68)% to 97% (48%/51%)
Volatility	2% to 84% (15%/8%)	3% to 102% (20%/18%)

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 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 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

- **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, as of each period-end:

- **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 level 3 derivatives.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Total level 3 derivatives				
Beginning balance	\$598	\$ 736	\$590	\$(288)
Net realized gains/(losses)	75	57	89	102
Net unrealized gains/(losses)	162	(108)	(49)	394
Purchases	133	145	420	325
Sales	(222)	(138)	(607)	(366)
Settlements	(44)	(71)	220	368
Transfers into level 3	(33)	(119)	60	82
Transfers out of level 3	(6)	208	(60)	93
Ending balance	\$663	\$ 710	\$663	\$ 710

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.
- Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. 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.
- 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents information, by product type, for derivatives included in the summary table above.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Interest rates, net				
Beginning balance	\$ 30	\$ (166)	\$ (109)	\$ (410)
Net realized gains/(losses)	(21)	(25)	(28)	(40)
Net unrealized gains/(losses)	103	(110)	163	(54)
Purchases	2	—	10	7
Sales	—	(2)	(12)	(8)
Settlements	(51)	32	41	178
Transfers into level 3	6	(18)	(15)	31
Transfers out of level 3	(19)	(3)	—	4
Ending balance	\$ 50	\$ (292)	\$ 50	\$ (292)
Credit, net				
Beginning balance	\$ 1,676	\$ 1,779	\$ 1,672	\$ 1,505
Net realized gains/(losses)	21	42	30	45
Net unrealized gains/(losses)	245	(164)	264	(95)
Purchases	23	45	102	60
Sales	(31)	(9)	(63)	(41)
Settlements	(56)	52	(207)	202
Transfers into level 3	37	(3)	110	25
Transfers out of level 3	(15)	8	(8)	49
Ending balance	\$ 1,900	\$ 1,750	\$ 1,900	\$ 1,750
Currencies, net				
Beginning balance	\$ (31)	\$ 218	\$ 461	\$ (181)
Net realized gains/(losses)	(2)	(19)	(23)	(37)
Net unrealized gains/(losses)	(147)	104	(311)	181
Purchases	6	7	9	22
Sales	(8)	(26)	(12)	(30)
Settlements	17	(59)	(293)	216
Transfers into level 3	(18)	3	(13)	28
Transfers out of level 3	(3)	(29)	(4)	—
Ending balance	\$ (186)	\$ 199	\$ (186)	\$ 199
Commodities, net				
Beginning balance	\$ 134	\$ 148	\$ 112	\$ 47
Net realized gains/(losses)	1	5	(18)	69
Net unrealized gains/(losses)	84	23	151	119
Purchases	7	25	27	37
Sales	(16)	(19)	(124)	(55)
Settlements	(46)	(8)	2	(132)
Transfers into level 3	6	(39)	—	44
Transfers out of level 3	(9)	—	11	6
Ending balance	\$ 161	\$ 135	\$ 161	\$ 135
Equities, net				
Beginning balance	\$(1,211)	\$(1,243)	\$(1,546)	\$(1,249)
Net realized gains/(losses)	76	54	128	65
Net unrealized gains/(losses)	(123)	39	(316)	243
Purchases	95	68	272	199
Sales	(167)	(82)	(396)	(232)
Settlements	92	(88)	677	(96)
Transfers into level 3	(64)	(62)	(22)	(46)
Transfers out of level 3	40	232	(59)	34
Ending balance	\$(1,262)	\$(1,082)	\$(1,262)	\$(1,082)

Level 3 Rollforward Commentary

Three Months Ended September 2019. The net realized and unrealized gains on level 3 derivatives of \$237 million (reflecting \$75 million of net realized gains and \$162 million of net unrealized gains) for the three months ended September 2019 included gains/(losses) of \$245 million reported in market making and \$(8) million reported in other principal transactions.

The net unrealized gains on level 3 derivatives for the three months ended September 2019 were primarily attributable to gains on certain credit and interest rate derivatives, primarily reflecting the impact of a decrease in interest rates, partially offset by losses on certain currency derivatives, primarily reflecting the impact of a decrease in interest rates and changes in foreign exchange rates, and losses on certain equity derivatives, primarily reflecting the impact of an increase in equity prices.

The drivers of both transfers into level 3 derivatives and transfers out of level 3 derivatives during the three months ended September 2019 were not material.

Nine Months Ended September 2019. The net realized and unrealized gains on level 3 derivatives of \$40 million (reflecting \$89 million of net realized gains and \$49 million of net unrealized losses) for the nine months ended September 2019 included gains/(losses) of \$99 million reported in market making and \$(59) million reported in other principal transactions.

The net unrealized losses on level 3 derivatives for the nine months ended September 2019 were attributable to losses on certain equity derivatives, reflecting the impact of an increase in equity prices, losses on certain currency derivatives, primarily reflecting the impact of a decrease in interest rates and changes in foreign exchange rates, partially offset by gains on certain credit and interest rate derivatives, primarily reflecting the impact of a decrease in interest rates, and gains on certain commodity derivatives, reflecting the impact of changes in commodity prices.

Transfers into level 3 derivatives during the nine months ended September 2019 primarily reflected transfers of certain credit derivative assets from level 2 primarily due to unobservable credit spread inputs becoming significant to the net risk of certain portfolios.

The drivers of transfers out of level 3 derivatives during the nine months ended September 2019 were not material.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

Three Months Ended September 2018. The net realized and unrealized losses on level 3 derivatives of \$51 million (reflecting \$57 million of net realized gains and \$108 million of net unrealized losses) for the three months ended September 2018 included gains/(losses) of \$27 million reported in market making and \$(78) million reported in other principal transactions.

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

Transfers into level 3 derivatives during the three months ended September 2018 primarily reflected transfers of certain equity derivative liabilities from level 2, primarily due to reduced transparency of volatility inputs used to value these derivatives and transfers of certain commodity derivative liabilities from level 2, primarily due to reduced transparency of natural gas spread inputs used to value these derivatives.

Transfers out of level 3 derivatives during the three months ended September 2018 primarily reflected transfers of certain equity derivative liabilities to level 2, principally due to certain unobservable inputs no longer being significant to the valuation of these derivatives.

Nine Months Ended September 2018. The net realized and unrealized gains on level 3 derivatives of \$496 million (reflecting \$102 million of net realized gains and \$394 million of net unrealized gains) for the nine months ended September 2018 included gains of \$446 million reported in market making and \$50 million reported in other principal transactions.

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

Both transfers into level 3 derivatives and transfers out of level 3 derivatives during the nine months ended September 2018 were not material.

OTC Derivatives

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

<i>\$ in millions</i>	Less than 1 Year	1 - 5 Years	Greater than 5 Years	Total
As of September 2019				
Assets				
Interest rates	\$ 5,328	\$18,864	\$68,296	\$ 92,488
Credit	587	3,380	3,948	7,915
Currencies	14,036	5,691	7,256	26,983
Commodities	2,835	1,056	358	4,249
Equities	4,572	4,836	1,219	10,627
Counterparty netting in tenors	(3,130)	(4,464)	(3,172)	(10,766)
Subtotal	\$24,228	\$29,363	\$77,905	\$131,496
Cross-tenor counterparty netting				(17,958)
Cash collateral netting				(66,722)
Total OTC derivative assets				\$ 46,816
Liabilities				
Interest rates	\$ 6,351	\$10,728	\$46,576	\$ 63,655
Credit	1,222	4,178	2,229	7,629
Currencies	11,118	8,386	4,911	24,415
Commodities	2,388	2,192	3,458	8,038
Equities	5,608	5,797	2,834	14,239
Counterparty netting in tenors	(3,130)	(4,464)	(3,172)	(10,766)
Subtotal	\$23,557	\$26,817	\$56,836	\$107,210
Cross-tenor counterparty netting				(17,958)
Cash collateral netting				(47,467)
Total OTC derivative liabilities				\$ 41,785
As of December 2018				
Assets				
Interest rates	\$ 2,810	\$13,177	\$47,426	\$ 63,413
Credit	807	3,676	3,364	7,847
Currencies	10,976	5,076	6,486	22,538
Commodities	4,978	2,101	145	7,224
Equities	4,962	5,244	1,329	11,535
Counterparty netting in tenors	(3,409)	(3,883)	(2,822)	(10,114)
Subtotal	\$21,124	\$25,391	\$55,928	\$102,443
Cross-tenor counterparty netting				(13,143)
Cash collateral netting				(48,724)
Total OTC derivative assets				\$ 40,576
Liabilities				
Interest rates	\$ 4,193	\$ 9,153	\$29,377	\$ 42,723
Credit	1,127	4,173	1,412	6,712
Currencies	13,553	6,871	4,474	24,898
Commodities	4,271	2,663	3,145	10,079
Equities	9,278	5,178	3,060	17,516
Counterparty netting in tenors	(3,409)	(3,883)	(2,822)	(10,114)
Subtotal	\$29,013	\$24,155	\$38,646	\$ 91,814
Cross-tenor counterparty netting				(13,143)
Cash collateral netting				(39,127)
Total OTC derivative liabilities				\$ 39,544

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.

Notes to Consolidated Financial Statements (Unaudited)

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 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. If a credit event occurs, the seller of protection is required to make a payment to the buyer, calculated according to 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.

- **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 a floating rate of interest and protection against any reduction in fair value of the reference obligation, and 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 September 2019, written credit derivatives had a total gross notional amount of \$550.50 billion and purchased credit derivatives had a total gross notional amount of \$621.43 billion, for total net notional purchased protection of \$70.93 billion. As of December 2018, written credit derivatives had a total gross notional amount of \$554.17 billion and purchased credit derivatives had a total gross notional amount of \$603.00 billion, for total net notional purchased protection of \$48.83 billion. The firm's written and purchased credit derivatives primarily consist of credit default swaps.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents information about credit derivatives.

\$ in millions	Credit Spread on Underlier (basis points)				Total
	0 - 250	251 - 500	501 - 1,000	Greater than 1,000	
As of September 2019					
Maximum Payout/Notional Amount of Written Credit Derivatives by Tenor					
Less than 1 year	\$129,944	\$11,234	\$ 564	\$ 3,135	\$144,877
1 – 5 years	293,226	11,842	6,824	9,402	321,294
Greater than 5 years	74,674	7,601	1,045	1,011	84,331
Total	\$497,844	\$30,677	\$ 8,433	\$13,548	\$550,502
Maximum Payout/Notional Amount of Purchased Credit Derivatives					
Offsetting	\$425,624	\$18,199	\$ 7,663	\$12,340	\$463,826
Other	\$147,746	\$ 6,237	\$ 1,711	\$ 1,909	\$157,603
Fair Value of Written Credit Derivatives					
Asset	\$ 11,718	\$ 592	\$ 203	\$ 217	\$ 12,730
Liability	1,009	1,210	549	3,936	6,704
Net asset/(liability)	\$ 10,709	\$ (618)	\$ (346)	\$ (3,719)	\$ 6,026
As of December 2018					
Maximum Payout/Notional Amount of Written Credit Derivatives by Tenor					
Less than 1 year	\$145,828	\$ 9,763	\$ 1,151	\$ 3,848	\$160,590
1 – 5 years	298,228	21,100	13,835	7,520	340,683
Greater than 5 years	45,690	5,966	1,121	122	52,899
Total	\$489,746	\$36,829	\$16,107	\$11,490	\$554,172
Maximum Payout/Notional Amount of Purchased Credit Derivatives					
Offsetting	\$413,445	\$25,373	\$14,243	\$ 8,841	\$461,902
Other	\$115,754	\$14,273	\$ 7,555	\$ 3,513	\$141,095
Fair Value of Written Credit Derivatives					
Asset	\$ 8,656	\$ 543	\$ 95	\$ 80	\$ 9,374
Liability	1,990	1,415	1,199	3,368	7,972
Net asset/(liability)	\$ 6,666	\$ (872)	\$ (1,104)	\$ (3,288)	\$ 1,402

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

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 gains/(losses), including hedges, attributable to the impact of changes in credit exposure and credit spreads (counterparty and the firm's) on derivatives was \$40 million for the three months ended September 2019, \$(88) million for the three months ended September 2018, \$(158) million for the nine months ended September 2019 and \$123 million for the nine months ended September 2018.

Bifurcated Embedded Derivatives

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

\$ in millions	As of	
	September 2019	December 2018
Fair value of assets	\$ 1,144	\$ 980
Fair value of liabilities	1,638	1,297
Net liability	\$ 494	\$ 317
Notional amount	\$10,979	\$10,229

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 and long-term borrowings with the related borrowings.

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 information about net derivative liabilities under bilateral agreements (excluding collateral posted), the fair value of collateral posted and additional collateral or termination payments that could have been called by counterparties in the event of a one- or two-notch downgrade in the firm's credit ratings.

\$ in millions	As of	
	September 2019	December 2018
Net derivative liabilities under bilateral agreements	\$38,810	\$29,583
Collateral posted	\$34,563	\$24,393
Additional collateral or termination payments:		
One-notch downgrade	\$ 329	\$ 262
Two-notch downgrade	\$ 836	\$ 959

**Notes to Consolidated Financial Statements
(Unaudited)****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 total interest expense.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Interest rate hedges	\$ 2,465	\$(1,554)	\$ 6,054	\$(3,449)
Hedged borrowings and deposits	\$(2,548)	\$ 1,382	\$(6,366)	\$ 3,004
Interest expense	\$ 4,451	\$ 4,205	\$13,519	\$11,435

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.

The table below presents the carrying value 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 values.

<i>\$ in millions</i>	Carrying Value	Cumulative Hedging Adjustment
As of September 2019		
Deposits	\$19,362	\$ 305
Unsecured short-term borrowings	\$ 7,304	\$ 21
Unsecured long-term borrowings	\$89,127	\$9,595
As of December 2018		
Deposits	\$11,924	\$(156)
Unsecured short-term borrowings	\$ 4,450	\$(12)
Unsecured long-term borrowings	\$68,839	\$2,759

In the table above, cumulative hedging adjustment included \$2.83 billion as of September 2019 and \$1.74 billion as of December 2018 of hedging adjustments from prior hedging relationships that were de-designated and substantially all were related to unsecured long-term borrowings.

In addition, cumulative hedging adjustments for items no longer designated in a hedging relationship were \$509 million as of September 2019 and \$1.51 billion as of December 2018 and substantially all were related to unsecured long-term borrowings.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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. For qualifying net investment hedges, all gains or losses on the hedging instruments are included in currency translation.

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

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Hedges:				
Foreign currency forward contract	\$367	\$118	\$351	\$538
Foreign currency-denominated debt	\$ 26	\$ 48	\$(18)	\$ 21

Gains or losses on individual net investments in non-U.S. operations are reclassified to earnings from accumulated other comprehensive income/(loss) when such net investments are sold or substantially liquidated. The gross and net gains and losses on hedges and the related net investments in non-U.S. operations reclassified to earnings from accumulated other comprehensive income/(loss) were not material for both the three and nine months ended September 2019 and September 2018.

The firm had designated \$2.99 billion as of September 2019 and \$1.99 billion as of December 2018 of foreign currency-denominated debt, included in unsecured long-term and 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 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 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 in Fixed Income, Currency and Commodities (FICC) Client Execution;
- Substantially all other secured financings, including transfers of assets accounted for as financings;
- Certain unsecured short-term and long-term borrowings, substantially all of which are hybrid financial instruments;
- Certain customer and other receivables, including transfers of assets accounted for as secured loans and certain margin loans; and
- Certain time deposits (deposits with no stated maturity are not eligible for a fair value option election), including structured certificates of deposit, which are hybrid financial instruments.

**Notes to Consolidated Financial Statements
(Unaudited)****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.

<i>\$ in millions</i>	Level 1	Level 2	Level 3	Total
As of September 2019				
Assets				
Resale agreements	\$ -	\$ 138,299	\$ -	\$ 138,299
Securities borrowed	-	30,003	-	30,003
Customer and other receivables	-	1,677	-	1,677
Total	\$ -	\$ 169,979	\$ -	\$ 169,979
Liabilities				
Deposits	\$ -	\$ (17,624)	\$ (3,946)	\$ (21,570)
Repurchase agreements	-	(109,413)	(25)	(109,438)
Securities loaned	-	(2,622)	-	(2,622)
Other secured financings	-	(15,750)	(334)	(16,084)
Unsecured borrowings:				
Short-term	-	(17,658)	(4,983)	(22,641)
Long-term	-	(35,440)	(11,607)	(47,047)
Other liabilities	-	(6)	(198)	(204)
Total	\$ -	\$(198,513)	\$(21,093)	\$(219,606)

As of December 2018

Assets				
Resale agreements	\$ -	\$ 139,220	\$ -	\$ 139,220
Securities borrowed	-	23,142	-	23,142
Customer and other receivables	-	3,183	6	3,189
Total	\$ -	\$ 165,545	\$ 6	\$ 165,551
Liabilities				
Deposits	\$ -	\$ (17,892)	\$ (3,168)	\$ (21,060)
Repurchase agreements	-	(78,694)	(29)	(78,723)
Securities loaned	-	(3,241)	-	(3,241)
Other secured financings	-	(20,734)	(170)	(20,904)
Unsecured borrowings:				
Short-term	-	(12,887)	(4,076)	(16,963)
Long-term	-	(34,761)	(11,823)	(46,584)
Other liabilities	-	(1)	(131)	(132)
Total	\$ -	\$(168,210)	\$(19,397)	\$(187,607)

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 (including the significant unobservable inputs) used to value other financial assets and financial liabilities at fair value.

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 September 2019 and December 2018, the firm had no level 3 resale agreements, securities borrowed or securities loaned. As of both September 2019 and December 2018, 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 (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 and weighted averages of significant unobservable inputs used to value level 3 other secured financings as of September 2019 are presented below. These ranges and weighted averages exclude unobservable inputs that are only relevant to a single instrument, and therefore are not meaningful.

- Yield: 3.3% to 17.6% (weighted average: 5.2%)
- Duration: 1.2 to 2.8 years (weighted average: 2.6 years)

Generally, increases in yield or duration, in isolation, would have resulted in a lower fair value measurement as of September 2019. Due to the distinctive nature of each of level 3 other secured financings, the interrelationship of inputs is not necessarily uniform across such financings. As of December 2018, level 3 other secured financings were not material. See Note 10 for further information about collateralized agreements and financings.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 and commodity prices for 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, Note 15 for further information about unsecured short-term borrowings and Note 16 for further information about long-term borrowings.

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.

Customer and Other Receivables. Customer and other receivables at fair value primarily consist of prepaid commodity transactions and 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 September 2019, the firm had no level 3 customer and other receivables. As of December 2018, the firm's level 3 customer and other receivables 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 such 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.

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.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Total other financial assets				
Beginning balance	\$ 2	\$ 7	\$ 6	\$ 4
Net realized gains/(losses)	5	–	5	2
Net unrealized gains/(losses)	(2)	4	(6)	6
Settlements	(5)	(1)	(5)	(2)
Ending balance	\$ –	\$ 10	\$ –	\$ 10
Total other financial liabilities				
Beginning balance	\$(20,819)	\$(17,583)	\$(19,397)	\$(15,462)
Net realized gains/(losses)	(135)	(47)	(307)	(161)
Net unrealized gains/(losses)	(185)	(165)	(1,839)	619
Sales	–	–	–	3
Issuances	(3,964)	(4,359)	(8,693)	(11,545)
Settlements	3,910	2,927	9,509	6,583
Transfers into level 3	(570)	(402)	(1,112)	(517)
Transfers out of level 3	670	408	746	1,259
Ending balance	\$(21,093)	\$(19,221)	\$(21,093)	\$(19,221)

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.
- Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. 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.

Notes to Consolidated Financial Statements (Unaudited)

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

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Deposits				
Beginning balance	\$ (3,622)	\$ (3,271)	\$ (3,168)	\$ (2,968)
Net realized gains/(losses)	–	(18)	(3)	(24)
Net unrealized gains/(losses)	(129)	6	(398)	94
Issuances	(267)	(185)	(661)	(630)
Settlements	150	242	272	293
Transfers into level 3	(136)	–	(59)	(16)
Transfers out of level 3	58	32	71	57
Ending balance	\$ (3,946)	\$ (3,194)	\$ (3,946)	\$ (3,194)
Repurchase agreements				
Beginning balance	\$ (28)	\$ (33)	\$ (29)	\$ (37)
Net unrealized gains/(losses)	1	–	(2)	–
Settlements	2	–	6	4
Ending balance	\$ (25)	\$ (33)	\$ (25)	\$ (33)
Other secured financings				
Beginning balance	\$ (202)	\$ (270)	\$ (170)	\$ (389)
Net realized gains/(losses)	4	3	19	6
Net unrealized gains/(losses)	(5)	(4)	(24)	(8)
Issuances	(1)	(3)	(20)	(8)
Settlements	3	8	14	95
Transfers into level 3	(133)	(80)	(153)	(86)
Transfers out of level 3	–	25	–	69
Ending balance	\$ (334)	\$ (321)	\$ (334)	\$ (321)
Unsecured short-term borrowings				
Beginning balance	\$ (5,026)	\$ (5,120)	\$ (4,076)	\$ (4,594)
Net realized gains/(losses)	(50)	(25)	(99)	(133)
Net unrealized gains/(losses)	34	(7)	(238)	186
Issuances	(2,147)	(2,066)	(4,085)	(5,596)
Settlements	1,982	1,765	3,270	4,288
Transfers into level 3	(159)	(208)	(217)	(277)
Transfers out of level 3	383	189	462	654
Ending balance	\$ (4,983)	\$ (5,472)	\$ (4,983)	\$ (5,472)
Unsecured long-term borrowings				
Beginning balance	\$ (11,769)	\$ (8,821)	\$ (11,823)	\$ (7,434)
Net realized gains/(losses)	(96)	(13)	(244)	(27)
Net unrealized gains/(losses)	(60)	(166)	(1,110)	369
Sales	–	–	–	3
Issuances	(1,542)	(2,099)	(3,907)	(5,294)
Settlements	1,773	912	5,947	1,903
Transfers into level 3	(142)	(114)	(683)	(138)
Transfers out of level 3	229	162	213	479
Ending balance	\$ (11,607)	\$ (10,139)	\$ (11,607)	\$ (10,139)
Other liabilities				
Beginning balance	\$ (172)	\$ (68)	\$ (131)	\$ (40)
Net realized gains/(losses)	7	6	20	17
Net unrealized gains/(losses)	(26)	6	(67)	(22)
Issuances	(7)	(6)	(20)	(17)
Ending balance	\$ (198)	\$ (62)	\$ (198)	\$ (62)

Level 3 Rollforward Commentary

Three Months Ended September 2019. The net realized and unrealized losses on level 3 other financial liabilities of \$320 million (reflecting \$135 million of net realized losses and \$185 million of net unrealized losses) for the three months ended September 2019 included gains/(losses) of \$(361) million reported in market making, \$4 million reported in other principal transactions and \$(4) million reported in interest expense in the consolidated statements of earnings, and \$41 million reported in debt valuation adjustment in the consolidated statements of comprehensive income.

The net unrealized losses on level 3 other financial liabilities for the three months ended September 2019 primarily reflected losses on certain hybrid financial instruments included in deposits, principally due to the impact of an increase in the market value of the underlying assets.

Transfers into level 3 other financial liabilities during the three months ended September 2019 reflected transfers of certain hybrid financial instruments included in unsecured short-term and long-term borrowings and deposits from level 2, principally due to reduced transparency of certain volatility and correlation inputs used to value these instruments, and transfers of certain hybrid financial instruments included in 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 other financial liabilities during the three months ended September 2019 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 certain volatility and correlation inputs used to value these instruments.

Nine Months Ended September 2019. The net realized and unrealized losses on level 3 other financial liabilities of \$2.15 billion (reflecting \$307 million of net realized losses and \$1.84 billion of net unrealized losses) for the nine months ended September 2019 included losses of \$1.78 billion reported in market making, \$2 million reported in other principal transactions and \$4 million reported in interest expense in the consolidated statements of earnings, and \$362 million reported in debt valuation adjustment in the consolidated statements of comprehensive income.

The net unrealized losses on level 3 other financial liabilities for the nine months ended September 2019 primarily reflected losses on certain hybrid financial instruments included in unsecured long-term borrowings, principally due to an increase in global equity prices, and losses on certain hybrid financial instruments included in deposits, principally due to the impact of an increase in the market value of the underlying assets.

Transfers into level 3 other financial liabilities during the nine months ended September 2019 primarily reflected transfers of certain hybrid financial instruments included in unsecured long-term and short-term borrowings from level 2, principally due to reduced transparency of certain volatility and correlation inputs used to value these instruments.

Transfers out of level 3 other financial liabilities during the nine months ended September 2019 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 certain volatility and correlation inputs used to value these instruments.

Notes to Consolidated Financial Statements (Unaudited)

Three Months Ended September 2018. The net realized and unrealized losses on level 3 other financial liabilities of \$212 million (reflecting \$47 million of net realized losses and \$165 million of net unrealized losses) for the three months ended September 2018 included gains/(losses) of \$(79) million reported in market making, \$1 million reported in other principal transactions and \$(1) million reported in interest expense in the consolidated statements of earnings, and \$(133) million reported in debt valuation adjustment in the consolidated statements of comprehensive income.

The net unrealized losses on level 3 other financial liabilities for the three months ended September 2018 primarily reflected losses on certain hybrid financial instruments included in unsecured long-term borrowings, principally due to the impact of tighter credit spreads and an increase in global equity prices.

Transfers into level 3 other financial liabilities during the three months ended September 2018 primarily reflected transfers of certain hybrid financial instruments included in unsecured short-term and long-term borrowings from level 2, principally due to reduced transparency of certain volatility inputs used to value these instruments.

Transfers out of level 3 other financial liabilities during the three months ended September 2018 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 certain volatility inputs used to value these instruments.

Nine Months Ended September 2018. The net realized and unrealized gains on level 3 other financial liabilities of \$458 million (reflecting \$161 million of net realized losses and \$619 million of net unrealized gains) for the nine months ended September 2018 included gains/(losses) of \$405 million reported in market making, \$3 million reported in other principal transactions and \$(2) million reported in interest expense in the consolidated statements of earnings, and \$52 million reported in debt valuation adjustment in the consolidated statements of comprehensive income.

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

Transfers into level 3 other financial liabilities during the nine months ended September 2018 primarily reflected transfers of certain hybrid financial instruments included in unsecured short-term and long-term borrowings from level 2, principally due to reduced transparency of certain volatility inputs used to value these instruments.

Transfers out of level 3 other financial liabilities during the nine months ended September 2018 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 certain volatility and correlation 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 election to apply the fair value option to certain financial assets and financial liabilities.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Unsecured short-term borrowings	\$ (293)	\$(256)	\$ (2,378)	\$ (271)
Unsecured long-term borrowings	(929)	126	(5,078)	1,248
Other liabilities	(19)	12	(47)	(5)
Other	(154)	(147)	(862)	(107)
Total	\$ (1,395)	\$(265)	\$ (8,365)	\$ 865

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 and long-term borrowings were substantially all related to the embedded derivative component of hybrid financial instruments for both the three and nine months ended September 2019 and September 2018. 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 primarily consists of gains/(losses) on customer and other receivables, deposits and other secured financings.

Excluding the gains and losses on the instruments accounted for at fair value 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.

**Notes to Consolidated Financial Statements
(Unaudited)****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.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Performing loans and long-term receivables		
Aggregate contractual principal in excess of fair value	\$ 711	\$1,837
Loans on nonaccrual status and/or more than 90 days past due		
Aggregate contractual principal in excess of fair value	\$7,861	\$5,260
Aggregate fair value of loans on nonaccrual status and/or more than 90 days past due	\$2,690	\$2,010

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.

The fair value of unfunded lending commitments for which the fair value option was elected was a liability of \$19 million as of September 2019 and \$45 million as of December 2018, and the related total contractual amount of these lending commitments was \$9.14 billion as of September 2019 and \$7.72 billion as of December 2018. 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 September 2019 and December 2018. The difference between the aggregate contractual principal amount and the related fair value of unsecured long-term borrowings for which the fair value option was elected was not material as of September 2019, and the aggregate contractual principal amount exceeded the related fair value by \$3.47 billion as of December 2018. The amounts above include both principal-protected and non-principal-protected long-term borrowings.

Impact of Credit Spreads on Loans and Lending Commitments

The estimated net gain/(loss) attributable to changes in instrument-specific credit spreads on loans and lending commitments for which the fair value option was elected was \$(22) million for the three months ended September 2019, \$55 million for the three months ended September 2018, \$161 million for the nine months ended September 2019 and \$247 million for the nine months ended September 2018. 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 information about the net debt valuation adjustment (DVA) gains/(losses) on financial liabilities for which the fair value option was elected.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
DVA (pre-tax)	\$372	\$(1,043)	\$(1,930)	\$483
DVA (net of tax)	\$278	\$ (787)	\$(1,450)	\$361

In the table above:

- DVA (net of tax) is included in debt valuation adjustment in the consolidated statements of comprehensive income.
- The gains/(losses) reclassified to earnings from accumulated other comprehensive income/(loss) upon extinguishment of such financial liabilities were not material for both the three and nine months ended September 2019 and September 2018.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 information about loans receivable.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Corporate loans	\$41,463	\$37,283
PWM loans	18,331	17,518
Commercial real estate loans	12,662	11,441
Residential real estate loans	5,657	7,284
Consumer loans	5,525	4,536
Other loans	3,520	3,594
Total loans receivable, gross	87,158	81,656
Allowance for loan losses	(1,321)	(1,066)
Total loans receivable	\$85,837	\$80,590

The fair value of loans receivable was \$86.41 billion as of September 2019 and \$80.74 billion as of December 2018. Had these loans been carried at fair value and included in the fair value hierarchy, \$45.27 billion as of September 2019 and \$40.64 billion as of December 2018 would have been classified in level 2, and \$41.14 billion as of September 2019 and \$40.10 billion as of December 2018 would have been classified in level 3.

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 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.
- **Private Wealth Management (PWM) Loans.** PWM loans includes loans extended by the private bank. These loans are used to finance investments in both financial and nonfinancial assets, bridge cash flow timing gaps or provide liquidity for other needs. Substantially all of such loans are secured by securities, commercial real estate or other assets.
- **Commercial Real Estate Loans.** Commercial real estate loans includes loans extended by the firm, other than those extended by the private bank, that are directly or indirectly secured by hotels, retail stores, multifamily housing complexes and commercial and industrial properties. Commercial real estate loans also includes loans purchased by the firm.

- **Residential Real Estate Loans.** Residential real estate loans primarily includes loans extended by the firm to clients who warehouse assets that are directly or indirectly secured by residential real estate and loans purchased by the firm.
- **Consumer Loans.** Consumer loans are unsecured and represent consumer and credit card loans originated by the firm.
- **Other Loans.** Other loans primarily includes loans extended to clients who warehouse assets that are directly or indirectly secured by consumer loans, including auto loans and private student loans. Other loans also includes unsecured consumer loans purchased by the firm.

Lending Commitments

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

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Corporate	\$120,777	\$113,484
Credit card	9,596	-
Other	8,687	7,513
Total	\$139,060	\$120,997

In the table above:

- Corporate lending commitments primarily relates to the firm's relationship lending activities.
- Credit card lending commitments represents credit card lines issued by the firm to consumers. These credit card lines are cancelable by the firm.
- Other lending commitments primarily relates to lending commitments extended to clients who warehouse assets backed by real estate and other assets and in connection with commercial real estate financing.
- The carrying value of lending commitments was a liability of \$508 million (including allowance for losses of \$354 million) as of September 2019 and \$443 million (including allowance for losses of \$286 million) as of December 2018.
- The estimated fair value of such lending commitments was a liability of \$3.17 billion as of September 2019 and \$3.78 billion as of December 2018. Had these lending commitments been carried at fair value and included in the fair value hierarchy, \$1.20 billion as of September 2019 and \$1.12 billion as of December 2018 would have been classified in level 2, and \$1.97 billion as of September 2019 and \$2.66 billion as of December 2018 would have been classified in level 3.

**Notes to Consolidated Financial Statements
(Unaudited)****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 tables below present information about PCI loans.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Commercial real estate loans	\$ 433	\$ 581
Residential real estate loans	1,516	2,457
Other loans	–	4
Total gross carrying value	\$1,949	\$3,042
Total outstanding principal balance	\$3,603	\$5,576
Total accretable yield	\$ 244	\$ 459

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Acquired during the period				
Fair value	\$ –	\$287	\$ –	\$ 585
Expected cash flows	\$ –	\$327	\$ –	\$ 655
Contractually required cash flows	\$ –	\$583	\$ –	\$1,287

In the table above:

- Fair value, expected cash flows and contractually required cash flows were as of the acquisition date.
- Expected cash flows represents the cash flows expected to be received over the life of the loan or as a result of liquidation of the underlying collateral.
- Contractually required cash flows represents cash flows required to be repaid by the borrower over the life of the loan.

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 consumer loans) and lending commitments (excluding credit card 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 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 consumer loans of \$7.47 billion as of September 2019 and \$7.58 billion as of December 2018) and lending commitments (excluding credit card commitments of \$9.60 billion as of September 2019) by an internally determined public rating agency equivalent and by regulatory risk rating.

<i>\$ in millions</i>	Loans	Lending Commitments	Total
Credit Rating Equivalent As of September 2019			
Investment-grade	\$28,846	\$ 85,152	\$113,998
Non-investment-grade	50,838	44,312	95,150
Total	\$79,684	\$129,464	\$209,148

As of December 2018

Investment-grade	\$28,290	\$ 81,959	\$110,249
Non-investment-grade	45,788	39,038	84,826
Total	\$74,078	\$120,997	\$195,075

Regulatory Risk Rating

As of September 2019			
Non-criticized/pass	\$72,830	\$125,988	\$198,818
Criticized	6,854	3,476	10,330
Total	\$79,684	\$129,464	\$209,148

As of December 2018

Non-criticized/pass	\$70,153	\$117,923	\$188,076
Criticized	3,925	3,074	6,999
Total	\$74,078	\$120,997	\$195,075

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.

Notes to Consolidated Financial Statements (Unaudited)

For consumer 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.

The table below presents gross consumer loans receivable and the concentration by refreshed FICO credit score.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Consumer loans, gross	\$5,525	\$4,536
Refreshed FICO credit score		
Greater than or equal to 660	87%	88%
Less than 660	13%	12%
Total	100%	100%

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 collect all principal and interest due under the contractual terms. 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. A loan is considered past due when a principal or interest payment has not been made according to its contractual terms.

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.

The gross carrying value of impaired loans receivable (excluding PCI loans) on nonaccrual status was \$1.39 billion as of September 2019 and \$838 million as of December 2018. Such loans included \$319 million as of September 2019 and \$27 million as of December 2018 of corporate loans that were modified in a troubled debt restructuring. The firm's lending commitments related to these loans were not material as of September 2019 and December 2018. The amount of loans 30 days or more past due was \$225 million as of September 2019 and \$208 million as of December 2018.

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 Credit Losses

The firm's allowance for credit losses consists of the 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 consumer 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

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.

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

<i>\$ in millions</i>	Specific	Portfolio	PCI	Total
As of September 2019				
Loans Receivable				
Corporate loans	\$1,055	\$ 40,408	\$ –	\$ 41,463
PWM loans	35	18,296	–	18,331
Commercial real estate loans	128	12,101	433	12,662
Residential real estate loans	168	3,973	1,516	5,657
Consumer loans	–	5,525	–	5,525
Other loans	–	3,520	–	3,520
Total	\$1,386	\$ 83,823	\$1,949	\$ 87,158
Lending Commitments				
Corporate	\$ 74	\$120,703	\$ –	\$120,777
Credit card	–	9,596	–	9,596
Other	13	8,674	–	8,687
Total	\$ 87	\$138,973	\$ –	\$139,060

As of December 2018

<i>\$ in millions</i>	Specific	Portfolio	PCI	Total
Loans Receivable				
Corporate loans	\$ 358	\$ 36,925	\$ –	\$ 37,283
PWM loans	46	17,472	–	17,518
Commercial real estate loans	9	10,851	581	11,441
Residential real estate loans	425	4,402	2,457	7,284
Consumer loans	–	4,536	–	4,536
Other loans	–	3,590	4	3,594
Total	\$ 838	\$ 77,776	\$3,042	\$ 81,656
Lending Commitments				
Corporate	\$ 31	\$113,453	\$ –	\$113,484
Other	–	7,513	–	7,513
Total	\$ 31	\$120,966	\$ –	\$120,997

In the table above:

- Gross loans receivable and lending commitments, subject to specific loan-level reserves, included \$705 million as of September 2019 and \$484 million as of December 2018 of impaired loans and lending commitments, which did not require a reserve as the loan was deemed to be recoverable.
- Gross loans receivable deemed impaired and subject to specific loan-level reserves as a percentage of total gross loans receivable was 1.6% as of September 2019 and 1.0% as of December 2018.

The table below presents information about the allowance for credit losses.

<i>\$ in millions</i>	Nine Months Ended September 2019		Year Ended December 2018	
	Loans Receivable	Lending Commitments	Loans Receivable	Lending Commitments
Changes in the allowance for credit losses				
Beginning balance	\$1,066	\$286	\$ 803	\$274
Net charge-offs	(329)	–	(337)	–
Provision	661	68	654	20
Other	(77)	–	(54)	(8)
Ending balance	\$1,321	\$354	\$1,066	\$286
Allowance for losses by impairment methodology				
Specific	\$ 187	\$ 14	\$ 102	\$ 3
Portfolio	1,016	340	848	283
PCI	118	–	116	–
Total	\$1,321	\$354	\$1,066	\$286

In the table above:

- Net charge-offs were primarily related to consumer loans for the nine months ended September 2019 and consumer loans and commercial real estate PCI loans for the year ended December 2018.
- The provision for credit losses was primarily related to consumer loans and corporate loans for both the nine months ended September 2019 and the year ended December 2018.
- 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 and lending commitments. Specific loan-level reserves were substantially all related to corporate loans. Reserves on PCI loans were related to real estate loans.
- Substantially all of the allowance for losses on lending commitments was related to corporate lending commitments.
- Allowance for loan losses as a percentage of total gross loans receivable was 1.5% as of September 2019 and 1.3% as of December 2018.
- Net charge-offs as a percentage of average total gross loans receivable were 0.5% on an annualized basis for the nine months ended September 2019 and 0.5% for the year ended December 2018.

Notes to Consolidated Financial Statements (Unaudited)

Note 10.

Collateralized Agreements and Financings

Collateralized agreements are resale agreements and securities borrowed. Collateralized financings are 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, which is included in interest income, and collateralized financings, which is included in interest expense, is recognized over the life of the transaction. 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.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Resale agreements	\$138,299	\$139,258
Securities borrowed	\$140,369	\$135,285
Repurchase agreements	\$109,438	\$ 78,723
Securities loaned	\$ 13,257	\$ 11,808

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.
- Securities borrowed of \$30.00 billion as of September 2019 and \$23.14 billion as of December 2018, and securities loaned of \$2.62 billion as of September 2019 and \$3.24 billion as of December 2018 were at fair value.

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 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

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. As these agreements are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 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 September 2019 and December 2018.

Offsetting Arrangements

The table below presents resale and repurchase agreements and securities borrowed and loaned transactions included in the consolidated statements of financial condition, as well as the amounts not offset in the consolidated statements of financial condition.

<i>\$ in millions</i>	Assets		Liabilities	
	Resale agreements	Securities borrowed	Repurchase agreements	Securities loaned
As of September 2019				
Included in consolidated statements of financial condition				
Gross carrying value	\$ 225,759	\$ 143,335	\$ 196,898	\$ 16,223
Counterparty netting	(87,460)	(2,966)	(87,460)	(2,966)
Total	138,299	140,369	109,438	13,257
Amounts not offset				
Counterparty netting	(5,097)	(1,330)	(5,097)	(1,330)
Collateral	(128,451)	(131,597)	(102,123)	(11,441)
Total	\$ 4,751	\$ 7,442	\$ 2,218	\$ 486
As of December 2018				
Included in consolidated statements of financial condition				
Gross carrying value	\$ 246,284	\$ 139,556	\$ 185,749	\$ 16,079
Counterparty netting	(107,026)	(4,271)	(107,026)	(4,271)
Total	139,258	135,285	78,723	11,808
Amounts not offset				
Counterparty netting	(5,870)	(1,104)	(5,870)	(1,104)
Collateral	(130,707)	(127,340)	(70,691)	(10,491)
Total	\$ 2,681	\$ 6,841	\$ 2,162	\$ 213

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.

<i>\$ in millions</i>	Repurchase agreements	Securities loaned
As of September 2019		
Money market instruments	\$ 1,323	\$ –
U.S. government and agency obligations	108,011	–
Non-U.S. government and agency obligations	66,182	1,191
Securities backed by commercial real estate	303	–
Securities backed by residential real estate	1,110	–
Corporate debt securities	8,586	338
State and municipal obligations	266	–
Other debt obligations	295	–
Equity securities	10,822	14,694
Total	\$ 196,898	\$ 16,223
As of December 2018		
Money market instruments	\$ 100	\$ –
U.S. government and agency obligations	88,060	–
Non-U.S. government and agency obligations	84,443	2,438
Securities backed by commercial real estate	3	–
Securities backed by residential real estate	221	–
Corporate debt securities	5,495	195
Other debt obligations	25	–
Equity securities	7,402	13,446
Total	\$ 185,749	\$ 16,079

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

<i>\$ in millions</i>	As of September 2019	
	Repurchase agreements	Securities loaned
No stated maturity and overnight	\$ 57,333	\$ 10,556
2 - 30 days	95,850	2,212
31 - 90 days	16,094	2,141
91 days - 1 year	23,279	1,314
Greater than 1 year	4,342	–
Total	\$ 196,898	\$ 16,223

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.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 (e.g., collateralized central bank financings, pledged commodities, bank loans and mortgage whole loans); and
- Other structured financing arrangements.

Other secured financings includes nonrecourse arrangements. Nonrecourse other secured financings were \$10.31 billion as of September 2019 and \$8.47 billion as of December 2018.

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. As these financings are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 through 8. Had these financings been included in the firm's fair value hierarchy, they would have been primarily classified in level 2 as of both September 2019 and December 2018.

The table below presents information about other secured financings.

<i>\$ in millions</i>	U.S. Dollar	Non-U.S. Dollar	Total
As of September 2019			
Other secured financings (short-term):			
At fair value	\$ 1,975	\$3,139	\$ 5,114
At amortized cost	138	-	138
Other secured financings (long-term):			
At fair value	7,815	3,155	10,970
At amortized cost	875	-	875
Total other secured financings	\$10,803	\$6,294	\$17,097
Other secured financings collateralized by:			
Financial instruments	\$ 5,078	\$5,145	\$10,223
Other assets	\$ 5,725	\$1,149	\$ 6,874
As of December 2018			
Other secured financings (short-term):			
At fair value	\$ 3,528	\$6,027	\$ 9,555
At amortized cost	-	-	-
Other secured financings (long-term):			
At fair value	9,010	2,339	11,349
At amortized cost	529	-	529
Total other secured financings	\$13,067	\$8,366	\$21,433
Other secured financings collateralized by:			
Financial instruments	\$ 8,960	\$7,550	\$16,510
Other assets	\$ 4,107	\$ 816	\$ 4,923

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.
- U.S. dollar-denominated short-term other secured financings at amortized cost had a weighted average interest rate of 4.54% as of September 2019. These rates include the effect of hedging activities.
- U.S. dollar-denominated long-term other secured financings at amortized cost had a weighted average interest rate of 1.69% as of September 2019 and 4.02% as of December 2018. These rates include the effect of hedging activities.
- Total other secured financings included \$1.83 billion as of September 2019 and \$2.40 billion as of December 2018 related to transfers of financial assets accounted for as financings rather than sales. Such financings were collateralized by financial assets of \$1.75 billion as of September 2019 and \$2.41 billion as of December 2018, both primarily included in financial instruments owned.
- Other secured financings collateralized by financial instruments included \$7.67 billion as of September 2019 and \$12.41 billion as of December 2018 of other secured financings collateralized by financial instruments owned, and included \$2.56 billion as of September 2019 and \$4.10 billion as of December 2018 of other secured financings collateralized by financial instruments received as collateral and repledged.

**Notes to Consolidated Financial Statements
(Unaudited)**

The table below presents other secured financings by maturity.

<i>\$ in millions</i>	As of September 2019
Other secured financings (short-term)	\$ 5,252
Other secured financings (long-term):	
2020	1,630
2021	2,412
2022	1,627
2023	1,433
2024	1,107
2025 - thereafter	3,636
Total other secured financings (long-term)	11,845
Total other secured financings	\$17,097

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.

<i>\$ in millions</i>	As of September 2019	December 2018
Collateral available to be delivered or repledged	\$697,037	\$681,516
Collateral that was delivered or repledged	\$555,789	\$565,625

In the table above, collateral available to be delivered or repledged excludes \$8.23 billion as of September 2019 and \$14.10 billion as of December 2018 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.

<i>\$ in millions</i>	As of September 2019	December 2018
Financial instruments owned pledged to counterparties that:		
Had the right to deliver or repledge	\$ 71,561	\$ 55,081
Did not have the right to deliver or repledge	\$104,441	\$ 73,540
Other assets pledged to counterparties that		
did not have the right to deliver or repledge	\$ 11,307	\$ 8,037

The firm also segregated securities included in financial instruments owned of \$16.90 billion as of September 2019 and \$23.03 billion as of December 2018 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 Note 10 for further information about collateralized financings and Note 23 for further information about interest expense.

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 are primarily accounted for at fair value and classified in level 2 of the fair value hierarchy. 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.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Residential mortgages	\$ 4,955	\$4,004	\$10,258	\$20,508
Commercial mortgages	5,134	2,883	8,169	7,079
Other financial assets	218	267	564	882
Total financial assets securitized	\$10,307	\$7,154	\$18,991	\$28,469
Retained interests cash flows	\$ 91	\$ 81	\$ 267	\$ 241

In the table above, financial assets securitized included assets of \$185 million during the three months ended September 2019, \$139 million during the three months ended September 2018, \$391 million during the nine months ended September 2019 and \$648 million during the nine months ended September 2018, which were securitized in a non-cash exchange for loans receivable and held-to-maturity securities.

The table below presents information about nonconsolidated securitization entities to which the firm sold assets and had continuing involvement as of the end of the period.

<i>\$ in millions</i>	Outstanding Principal Amount	Retained Interests	Purchased Interests
As of September 2019			
U.S. government agency-issued collateralized mortgage obligations	\$12,889	\$1,321	\$ 2
Other residential mortgage-backed	22,101	984	18
Other commercial mortgage-backed	21,450	554	5
Corporate debt and other asset-backed	2,862	103	–
Total	\$59,302	\$2,962	\$25
As of December 2018			
U.S. government agency-issued collateralized mortgage obligations	\$24,506	\$1,758	\$29
Other residential mortgage-backed	19,560	941	15
Other commercial mortgage-backed	15,088	448	10
Corporate debt and other asset-backed	3,311	133	3
Total	\$62,465	\$3,280	\$57

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 2014 and thereafter.
- The fair value of retained interests was \$2.97 billion as of September 2019 and \$3.28 billion as of December 2018.

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 \$70 million as of September 2019 and \$75 million as of December 2018, and the notional amount of these derivatives and commitments was \$1.16 billion as of September 2019 and \$1.09 billion as of December 2018. The notional amounts of these derivatives and commitments are included in maximum exposure to loss in the nonconsolidated VIE table in Note 12.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents information about the weighted average key economic assumptions used in measuring the fair value of mortgage-backed retained interests.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Fair value of retained interests	\$ 2,867	\$ 3,151
Weighted average life (years)	5.4	7.2
Constant prepayment rate	14.6%	11.9%
Impact of 10% adverse change	\$ (25)	\$ (27)
Impact of 20% adverse change	\$ (47)	\$ (53)
Discount rate	4.8%	4.7%
Impact of 10% adverse change	\$ (49)	\$ (75)
Impact of 20% adverse change	\$ (97)	\$ (147)

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 \$103 million and a weighted average life of 3.6 years as of September 2019, and a fair value of \$133 million and a weighted average life of 4.2 years as of December 2018. 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 September 2019 and December 2018. The firm's maximum exposure to adverse changes in the value of these interests is the carrying value of \$103 million as of September 2019 and \$133 million as of December 2018.

Note 12.

Variable Interest Entities

A variable interest in a VIE is an investment (e.g., debt or equity) 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 generally 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, purchases and sells beneficial interests issued by corporate debt and other asset-backed VIEs in connection with market-making activities, and makes loans to VIEs that warehouse corporate debt. 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 investment fund VIEs it manages and is entitled to receive fees from these VIEs. The firm has generally not sold assets to, or entered into derivatives with, these VIEs.

Nonconsolidated VIEs

The table below presents a summary of the nonconsolidated VIEs in which the firm holds variable interests.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Total nonconsolidated VIEs		
Assets in VIEs	\$120,329	\$118,186
Carrying value of variable interests — assets	\$ 9,320	\$ 9,543
Carrying value of variable interests — liabilities	\$ 677	\$ 478
Maximum exposure to loss:		
Retained interests	\$ 2,962	\$ 3,280
Purchased interests	653	983
Commitments and guarantees	3,364	2,745
Derivatives	9,290	8,975
Loans and investments	5,282	4,728
Total maximum exposure to loss	\$ 21,551	\$ 20,711

In the table above:

- The nature of the firm's variable interests is described in the rows under maximum exposure to loss.
- 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 has not been reduced by unrealized losses. As a result, the maximum exposure to loss exceeds liabilities recorded for commitments and guarantees, and derivatives.

**Notes to Consolidated Financial Statements
(Unaudited)**

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

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Mortgage-backed		
Assets in VIEs	\$67,093	\$73,262
Carrying value of variable interests — assets	\$ 3,451	\$ 4,090
Maximum exposure to loss:		
Retained interests	\$ 2,859	\$ 3,147
Purchased interests	590	941
Commitments and guarantees	47	35
Derivatives	66	77
Total maximum exposure to loss	\$ 3,562	\$ 4,200
Real estate, credit- and power-related and other investing		
Assets in VIEs	\$20,517	\$18,851
Carrying value of variable interests — assets	\$ 3,372	\$ 3,601
Carrying value of variable interests — liabilities	\$ 5	\$ 20
Maximum exposure to loss:		
Commitments and guarantees	\$ 1,209	\$ 1,543
Derivatives	166	113
Loans and investments	3,369	3,572
Total maximum exposure to loss	\$ 4,744	\$ 5,228
Corporate debt and other asset-backed		
Assets in VIEs	\$16,215	\$15,842
Carrying value of variable interests — assets	\$ 2,099	\$ 1,563
Carrying value of variable interests — liabilities	\$ 672	\$ 458
Maximum exposure to loss:		
Retained interests	\$ 103	\$ 133
Purchased interests	63	42
Commitments and guarantees	2,029	1,113
Derivatives	9,055	8,782
Loans and investments	1,515	867
Total maximum exposure to loss	\$12,765	\$10,937
Investments in funds		
Assets in VIEs	\$16,504	\$10,231
Carrying value of variable interests — assets	\$ 398	\$ 289
Maximum exposure to loss:		
Commitments and guarantees	\$ 79	\$ 54
Derivatives	3	3
Loans and investments	398	289
Total maximum exposure to loss	\$ 480	\$ 346

As of both September 2019 and December 2018, the carrying values of the firm's variable interests in nonconsolidated VIEs are included in the consolidated statements of financial condition as follows:

- Mortgage-backed: Assets were primarily included in financial instruments owned and loans receivable.
- 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.
- Corporate debt and other asset-backed: Assets were primarily included in loans receivable 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.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Total consolidated VIEs		
<i>Assets</i>		
Cash and cash equivalents	\$ 153	\$ 84
Loans receivable	1,383	319
Customer and other receivables	3	2
Financial instruments owned	2,019	2,034
Other assets	1,064	1,261
Total	\$4,622	\$3,700
<i>Liabilities</i>		
Other secured financings	\$1,154	\$1,204
Customer and other payables	60	—
Financial instruments sold, but not yet purchased	6	20
Unsecured short-term borrowings	40	45
Unsecured long-term borrowings	221	207
Other liabilities	964	1,100
Total	\$2,445	\$2,576

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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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

\$ in millions	As of	
	September 2019	December 2018
Real estate, credit-related and other investing		
<i>Assets</i>		
Cash and cash equivalents	\$ 153	\$ 84
Loans receivable	1,383	269
Customer and other receivables	3	–
Financial instruments owned	1,983	1,815
Other assets	1,064	1,258
Total	\$4,586	\$3,426
<i>Liabilities</i>		
Other secured financings	\$ 662	\$ 596
Customer and other payables	60	–
Financial instruments sold, but not yet purchased	6	20
Other liabilities	964	1,100
Total	\$1,692	\$1,716
Mortgage-backed and other asset-backed		
<i>Assets</i>		
Loans receivable	\$ –	\$ 50
Customer and other receivables	–	2
Financial instruments owned	35	210
Other assets	–	3
Total	\$ 35	\$ 265
<i>Liabilities</i>		
Other secured financings	\$ 20	\$ 140
Total	\$ 20	\$ 140
Principal-protected notes		
<i>Assets</i>		
Financial instruments owned	\$ 1	\$ 9
Total	\$ 1	\$ 9
<i>Liabilities</i>		
Other secured financings	\$ 472	\$ 468
Unsecured short-term borrowings	40	45
Unsecured long-term borrowings	221	207
Total	\$ 733	\$ 720

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

The table below presents other assets by type.

\$ in millions	As of	
	September 2019	December 2018
Property, leasehold improvements and equipment	\$21,227	\$18,317
Held-to-maturity securities	5,763	1,288
Goodwill and identifiable intangible assets	4,886	4,082
Operating lease right-of-use assets	2,363	–
Income tax-related assets	1,891	1,529
Miscellaneous receivables and other	4,510	5,424
Total	\$40,640	\$30,640

Property, Leasehold Improvements and Equipment

Property, leasehold improvements and equipment is net of accumulated depreciation and amortization of \$9.94 billion as of September 2019 and \$9.08 billion as of December 2018. Property, leasehold improvements and equipment included \$5.95 billion as of September 2019 and \$5.57 billion as of December 2018 that the firm uses in connection with its operations, and \$613 million as of September 2019 and \$896 million as of December 2018 of foreclosed real estate primarily related to PCI loans. 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 shorter of the useful life of the improvement or the term of the lease. Capitalized costs of software developed or obtained for internal use are amortized on a straight-line basis over three years.

The firm tests property, leasehold improvements and equipment 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 or asset group 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 or asset group 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 or asset group if the carrying value of the asset or asset group exceeds its estimated fair value.

There were no material impairments during each of the three and nine months ended September 2019 and September 2018.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

Held-to-Maturity Securities

Held-to-maturity securities are accounted for at amortized cost, net of other-than-temporary impairments.

The table below presents information about held-to-maturity securities by type and tenor.

<i>\$ in millions</i>	Amortized Cost	Fair Value	Weighted Average Yield
	September 2019	December 2018	
As of September 2019			
Less than 5 years	\$3,533	\$3,628	2.40%
Greater than 5 years	1,526	1,584	2.25%
Total U.S. government obligations	5,059	5,212	2.35%
Less than 5 years	5	5	4.27%
Greater than 5 years	699	717	1.67%
Total securities backed by real estate	704	722	1.69%
Total held-to-maturity securities	\$5,763	\$5,934	2.27%
As of December 2018			
Less than 5 years	\$ 498	\$ 511	3.08%
Total U.S. government obligations	498	511	3.08%
Less than 5 years	5	6	4.61%
Greater than 5 years	785	800	1.78%
Total securities backed by real estate	790	806	1.80%
Total held-to-maturity securities	\$1,288	\$1,317	2.29%

In the table above:

- Substantially all of the securities backed by real estate consist of securities backed by residential real estate.
- As these securities are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 through 8. Had these securities been included in the firm's fair value hierarchy, U.S. government obligations would have been classified in level 1 and substantially all securities backed by real estate would have been classified in level 2 of the fair value hierarchy as of both September 2019 and December 2018.
- The gross unrealized gains were \$173 million and the gross unrealized losses were not material as of September 2019. Gross unrealized gains/(losses) were not material as of December 2018.
- Held-to-maturity securities in an unrealized loss position are periodically reviewed for other-than-temporary impairment. The firm considers various factors, including market conditions, changes in issuer credit ratings, severity and duration of the unrealized losses, and the intent and ability to hold the security until recovery to determine if the securities are other-than-temporarily impaired. There were no such impairments during each of the three and nine months ended September 2019 and September 2018.

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.

The table below presents the carrying value of goodwill.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Investment Banking:		
Financial Advisory	\$ 98	\$ 98
Underwriting	183	183
Institutional Client Services:		
FICC Client Execution	269	269
Equities client execution	2,403	2,403
Securities services	105	105
Investing & Lending	91	91
Investment Management	1,047	609
Total	\$4,196	\$3,758

In the table above, the increase in goodwill in Investment Management from December 2018 to September 2019 included \$398 million related to the acquisition of United Capital Financial Partners, Inc. (United Capital) in July 2019.

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.

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.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

In the fourth quarter of 2018, 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 nine months ended September 2019 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 September 2019.

Identifiable Intangible Assets. The table below presents identifiable intangible assets by segment and type.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
By Segment		
Institutional Client Services:		
FICC Client Execution	\$ 5	\$ 10
Equities client execution	–	37
Investing & Lending	203	178
Investment Management	482	99
Total	\$ 690	\$ 324
By Type		
Customer lists		
Gross carrying value	\$ 1,427	\$ 1,117
Accumulated amortization	(1,031)	(970)
Net carrying value	396	147
Acquired leases and other		
Gross carrying value	815	636
Accumulated amortization	(521)	(459)
Net carrying value	294	177
Total gross carrying value	2,242	1,753
Total accumulated amortization	(1,552)	(1,429)
Total net carrying value	\$ 690	\$ 324

The firm acquired \$507 million of intangible assets during the nine months ended September 2019, primarily related to customer lists, with a weighted average amortization period of 10 years. This amount included \$354 million of intangible assets that were acquired in connection with the acquisition of United Capital. The firm acquired \$137 million of intangible assets during 2018, primarily related to acquired leases, with a weighted average amortization period of 4 years.

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

The tables below present information about the amortization of identifiable intangible assets.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Amortization	\$52	\$33	\$134	\$118

<i>\$ in millions</i>	As of September 2019
Estimated future amortization	
Remainder of 2019	\$ 38
2020	\$121
2021	\$ 92
2022	\$ 79
2023	\$ 74
2024	\$ 59

The firm tests intangible 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 or asset group 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 or asset group 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 or asset group if the carrying value of the asset or asset group exceeds its estimated fair value. There were no material impairments during each of the three and nine months ended September 2019 and September 2018.

**Notes to Consolidated Financial Statements
(Unaudited)****Operating Lease Right-of-Use Assets**

The firm enters into operating leases for real estate, office equipment and other assets, substantially all of which are used in connection with its operations. The firm adopted ASU No. 2016-02 in January 2019, which required the firm to recognize, for leases longer than one year, 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 payments. The lease term is generally determined based on the contractual maturity of the lease. For leases where the firm has the option to terminate or extend the lease, an assessment of the likelihood of exercising the option is incorporated into the determination of the lease term. Such assessment is initially performed at the inception of the lease and is updated if events occur that impact the original assessment.

An operating lease right-of-use asset is initially determined based on the operating lease liability, adjusted for initial direct costs, lease incentives and amounts paid at or prior to lease commencement. This amount is then amortized over the lease term. The firm recognized \$885 million (primarily related to the firm's new European headquarters in London) of right-of-use assets and operating lease liabilities in non-cash transactions for leases entered into or assumed during the nine months ended September 2019. See Note 17 for information about operating lease liabilities.

For leases where the firm has ceased using the space and management has concluded that the firm will not derive any future economic benefits, the firm records an impairment of right-of-use assets. There were no such impairments during the nine months ended September 2019.

Miscellaneous Receivables and Other

Miscellaneous receivables and other included:

- Investments in qualified affordable housing projects of \$614 million as of September 2019 and \$653 million as of December 2018.
- Assets classified as held for sale of \$749 million as of September 2019 and \$365 million as of December 2018 related to the firm's consolidated investments within its Investing & Lending segment, substantially all of which consisted of property and equipment. In addition, assets classified as held for sale also included assets of \$1.01 billion as of December 2018, related to the firm's new European headquarters in London. This property was sold in January 2019 pursuant to a sale and leaseback agreement and the firm recognized a right-of-use asset upon the leaseback.
- Equity-method investments of \$235 million as of September 2019 and \$357 million as of December 2018.

Note 14.**Deposits**

The table below presents the types and sources of deposits.

<i>\$ in millions</i>	Savings and Demand	Time	Total
As of September 2019			
Private bank deposits	\$ 51,970	\$ 1,879	\$ 53,849
Consumer deposits	41,483	13,547	55,030
Brokered certificates of deposit	–	38,406	38,406
Deposit sweep programs	16,457	–	16,457
Institutional deposits	1	18,959	18,960
Total	\$109,911	\$72,791	\$182,702
As of December 2018			
Private bank deposits	\$ 52,028	\$ 2,311	\$ 54,339
Consumer deposits	27,987	7,641	35,628
Brokered certificates of deposit	–	35,876	35,876
Deposit sweep programs	15,903	–	15,903
Institutional deposits	1	16,510	16,511
Total	\$ 95,919	\$62,338	\$158,257

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 \$21.57 billion as of September 2019 and \$21.06 billion as of December 2018 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 1.7 years as of September 2019 and 1.8 years as of December 2018.
- Deposit sweep programs represent long-term contractual agreements with U.S. broker-dealers who sweep client cash to FDIC-insured deposits. As of September 2019, the firm had 11 such deposit sweep program agreements.
- Deposits insured by the FDIC were \$100.33 billion as of September 2019 and \$86.27 billion as of December 2018.
- Deposits insured by the U.K.'s Financial Services Compensation Scheme were \$12.31 billion as of September 2019 and \$6.05 billion as of December 2018.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents the location of deposits.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
U.S. offices	\$142,697	\$126,444
Non-U.S. offices	40,005	31,813
Total	\$182,702	\$158,257

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.

<i>\$ in millions</i>	As of September 2019		
	U.S.	Non-U.S.	Total
Remainder of 2019	\$ 4,607	\$ 8,006	\$12,613
2020	22,802	7,745	30,547
2021	7,629	39	7,668
2022	7,532	80	7,612
2023	5,831	55	5,886
2024	4,050	120	4,170
2025 - thereafter	3,377	918	4,295
Total	\$55,828	\$16,963	\$72,791

As of September 2019, deposits in U.S. offices included \$7.87 billion and non-U.S. offices included \$16.96 billion of time deposits in denominations that met or exceeded the applicable insurance limits, or were otherwise not covered by insurance.

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 September 2019 and December 2018. As these savings and demand deposits and time deposits are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 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 September 2019 and December 2018.

Note 15.

Short-Term Borrowings

The table below presents information about short-term borrowings.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Other secured financings (short-term)	\$ 5,252	\$ 9,555
Unsecured short-term borrowings	51,958	40,502
Total	\$57,210	\$50,057

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. As these unsecured short-term borrowings are not accounted for at fair value, they are not included in the firm's fair value hierarchy in Notes 5 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 September 2019 and December 2018.

The table below presents information about unsecured short-term borrowings.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Current portion of unsecured long-term borrowings	\$34,240	\$27,476
Hybrid financial instruments	15,684	10,908
Other unsecured short-term borrowings	2,034	2,118
Total unsecured short-term borrowings	\$51,958	\$40,502
Weighted average interest rate	2.66%	2.51%

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.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

Note 16.

Long-Term Borrowings

The table below presents information about long-term borrowings.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Other secured financings (long-term)	\$ 11,845	\$ 11,878
Unsecured long-term borrowings	216,878	224,149
Total	\$228,723	\$236,027

See Note 10 for information about other secured financings.

The table below presents information about unsecured long-term borrowings.

<i>\$ in millions</i>	U.S. Dollar	Non-U.S. Dollar	Total
As of September 2019			
Fixed-rate obligations	\$ 96,921	\$35,721	\$132,642
Floating-rate obligations	52,452	31,784	84,236
Total	\$149,373	\$67,505	\$216,878
As of December 2018			
Fixed-rate obligations	\$ 99,935	\$36,654	\$136,589
Floating-rate obligations	54,321	33,239	87,560
Total	\$154,256	\$69,893	\$224,149

In the table above:

- Unsecured long-term borrowings consists principally of senior borrowings, which have maturities extending through 2069.
- Floating-rate obligations includes equity-linked and indexed instruments. Floating interest rates are generally based on LIBOR or Euro Interbank Offered Rate.
- U.S. dollar-denominated debt had interest rates ranging from 2.00% to 10.04% (with a weighted average rate of 4.22%) as of both September 2019 and December 2018. These rates exclude unsecured long-term borrowings accounted for at fair value under the fair value option.
- Non-U.S. dollar-denominated debt had interest rates ranging from 0.12% to 13.00% (with a weighted average rate of 2.28%) as of September 2019 and 0.31% to 13.00% (with a weighted average rate of 2.43%) as of December 2018. These rates exclude unsecured long-term borrowings accounted for at fair value under the fair value option.

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

<i>\$ in millions</i>	As of September 2019
2020	\$ 7,784
2021	24,466
2022	24,943
2023	26,875
2024	18,883
2025 - thereafter	113,927
Total	\$216,878

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 \$10.05 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: \$18 million in 2020, \$298 million in 2021, \$(39) million in 2022, \$139 million in 2023, \$488 million in 2024, and \$9.15 billion in 2025 and thereafter.

The firm designates certain derivatives as fair value hedges to convert a portion of 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Fixed-rate obligations:		
At fair value	\$ 711	\$ 28
At amortized cost	50,114	74,552
Floating-rate obligations:		
At fair value	46,336	46,556
At amortized cost	119,717	103,013
Total	\$216,878	\$224,149

In the table above, the aggregate amounts of unsecured long-term borrowings had weighted average interest rates of 2.89% (3.69% related to fixed-rate obligations and 2.53% related to floating-rate obligations) as of September 2019 and 3.21% (3.79% related to fixed-rate obligations and 2.79% related to floating-rate obligations) as of December 2018. These rates exclude unsecured long-term borrowings accounted for at fair value under the fair value option.

As of both September 2019 and December 2018, 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, they are not included in the firm's fair value hierarchy in Notes 5 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 September 2019 and December 2018.

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. Subordinated debt had maturities ranging from 2021 to 2045 as of both September 2019 and December 2018. Subordinated debt that matures within one year is included in unsecured short-term borrowings.

The table below presents information about subordinated borrowings.

<i>\$ in millions</i>	Par Amount	Carrying Value	Rate
As of September 2019			
Subordinated debt	\$13,966	\$17,696	3.61%
Junior subordinated debt	1,140	1,617	3.16%
Total	\$15,106	\$19,313	3.58%
As of December 2018			
Subordinated debt	\$14,023	\$15,703	4.09%
Junior subordinated debt	1,140	1,425	3.19%
Total	\$15,163	\$17,128	4.02%

In the table above, the rate is the weighted average interest rate for these borrowings (excluding borrowings accounted for at fair value under the fair value option), 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.

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. As of both September 2019 and December 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 nine months ended September 2018, the firm purchased Trust Preferred securities with a par amount of \$27.8 million and a carrying value of \$35.4 million and delivered these securities, along with \$1.0 million of common beneficial interests, to the Trust in a non-cash exchange for a corresponding par amount and carrying value of the junior subordinated debt. Following the exchanges, these Trust Preferred securities, common beneficial interests and junior subordinated debt were extinguished. The Trust is a wholly-owned finance subsidiary of the firm for regulatory and legal purposes but is not consolidated for accounting purposes.

**Notes to Consolidated Financial Statements
(Unaudited)**

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 Perpetual 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**

The table below presents other liabilities by type.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Compensation and benefits	\$ 5,467	\$ 6,834
Income tax-related liabilities	3,174	2,864
Operating lease liabilities	2,383	–
Noncontrolling interests	1,663	1,568
Employee interests in consolidated funds	95	122
Accrued expenses and other	6,612	6,219
Total	\$19,394	\$17,607

In the table above, 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 both September 2019 and December 2018, the firm's contract liabilities were not material.

Operating Lease Liabilities

The firm adopted ASU No. 2016-02 in January 2019, which required the firm to recognize, for leases longer than one year, 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 payments. See Note 13 for information about operating lease right-of-use assets.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents information about operating lease liabilities.

<i>\$ in millions</i>	As of September 2019
Remainder of 2019	\$ 111
2020	358
2021	280
2022	250
2023	221
2024	207
2025 - thereafter	2,584
Total undiscounted lease payments	4,011
Imputed interest	(1,628)
Total operating lease liabilities	\$ 2,383
Weighted average remaining lease term	18 years
Weighted average discount rate	5.18%

In the table above, the weighted average discount rate represents the firm's incremental borrowing rate as of January 2019 for leases existing on the date of adoption of ASU No. 2016-02 and at the lease inception date for leases entered into subsequent to the adoption of this ASU.

Operating lease costs were \$132 million for the three months ended September 2019, \$374 million for the nine months ended September 2019, \$101 million for the three months ended September 2018 and \$306 million for the nine months ended September 2018. Variable lease costs, which are included in operating lease costs, were not material for each of the three and nine months ended September 2019 and September 2018.

Operating lease liabilities include obligations for office space held in excess of current requirements. Operating lease costs relating to space held for growth is included in occupancy expenses. Total occupancy expenses for space held in excess of the firm's current requirements were not material for both the nine months ended September 2019 and September 2018.

Lease payments relating to operating lease arrangements that were signed, but have not yet commenced as of September 2019, were not material.

Note 18.
Commitments, Contingencies and Guarantees

Commitments

The table below presents commitments by type.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Commitment Type		
Commercial lending:		
Investment-grade	\$ 85,643	\$ 81,729
Non-investment-grade	56,953	51,793
Warehouse financing	6,127	4,060
Credit card	9,596	-
Total lending	158,319	137,582
Collateralized agreement	68,669	54,480
Collateralized financing	24,837	15,429
Letters of credit	434	445
Investment	6,306	7,595
Other	5,470	4,892
Total commitments	\$264,035	\$220,423

The table below presents commitments by expiration.

<i>\$ in millions</i>	As of September 2019			
	Remainder of 2019	2020 - 2021	2022 - 2023	2024 - Thereafter
Commitment Type				
Commercial lending:				
Investment-grade	\$ 2,618	\$25,849	\$35,564	\$21,612
Non-investment-grade	1,943	13,123	22,498	19,389
Warehouse financing	231	3,154	2,214	528
Credit card	9,596	-	-	-
Total lending	14,388	42,126	60,276	41,529
Collateralized agreement	65,575	3,094	-	-
Collateralized financing	24,837	-	-	-
Letters of credit	245	145	4	40
Investment	1,589	1,177	1,062	2,478
Other	5,309	161	-	-
Total commitments	\$111,943	\$46,703	\$61,342	\$44,047

**Notes to Consolidated Financial Statements
(Unaudited)****Lending Commitments**

The firm's commercial and warehouse financing lending commitments 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. The firm also provides credit to consumers by issuing credit card lines. These credit card lines are cancelable by the firm.

The table below presents information about lending commitments.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Held for investment	\$139,060	\$120,997
Held for sale	9,224	8,602
At fair value	10,035	7,983
Total	\$158,319	\$137,582

In the table above:

- Held for investment lending commitments are accounted for on an accrual basis. See Note 9 for further information about such commitments.
- Held for sale lending commitments are accounted for at the lower of cost or fair value.
- Gains or losses related to lending commitments at fair value, if any, are generally recorded net of any fees in other principal transactions.
- Substantially all lending commitments relate to the firm's Investing & Lending segment.

Commercial Lending. The firm's commercial lending commitments were primarily extended to investment-grade corporate borrowers. Such commitments primarily included \$99.90 billion as of September 2019 and \$93.99 billion as of December 2018, related to relationship lending activities (principally used for operating and general corporate purposes) and \$30.08 billion as of September 2019 and \$27.92 billion as of December 2018, related to other investment banking activities (generally extended for contingent acquisition financing and are often intended to be short-term in nature, as borrowers often seek to replace them with other funding sources). The firm also extends lending commitments in connection with other types of corporate lending, as well as commercial real estate financing. See Note 9 for further information about funded loans.

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 \$7.69 billion as of September 2019 and \$15.52 billion as of December 2018. 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 \$750 million, of which no protection had been provided as of September 2019 and \$550 million was provided as of December 2018. 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 credit index.

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

**Collateralized Agreement Commitments/
Collateralized Financing Commitments**

Collateralized agreement commitments includes forward starting resale and securities borrowing agreements, and collateralized financing commitments includes forward starting repurchase and secured lending agreements that settle at a future date, generally within three business days. Collateralized agreement commitments also includes transactions where the firm has entered 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.

**Notes to Consolidated Financial Statements
(Unaudited)****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 \$2.07 billion as of September 2019 and \$2.42 billion as of December 2018, 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.

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. During the period 2005 through 2008 in connection with both sales and securitizations of loans, the firm provided loan-level representations and/or assigned the loan-level representations from the party from whom the firm purchased the loans.

Based on 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. 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.

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 by January 2021. As of September 2019, approximately \$1.45 billion of such relief was provided. This relief was provided 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 derivatives that meet the definition of a guarantee, securities lending indemnifications and certain other financial guarantees.

<i>\$ in millions</i>	Derivatives	Securities lending indemnifications	Other financial guarantees
As of September 2019			
Carrying Value of Net Liability	\$ 5,904	\$ -	\$ 30
Maximum Payout/Notional Amount by Period of Expiration			
Remainder of 2019	\$ 31,987	\$17,867	\$ 451
2020 - 2021	116,769	-	2,682
2022 - 2023	28,542	-	1,644
2024 - thereafter	42,729	-	514
Total	\$220,027	\$17,867	\$5,291
As of December 2018			
Carrying Value of Net Liability	\$ 4,105	\$ -	\$ 38
Maximum Payout/Notional Amount by Period of Expiration			
2019	\$101,169	\$27,869	\$1,379
2020 - 2021	77,955	-	2,252
2022 - 2023	17,813	-	2,021
2024 - thereafter	67,613	-	241
Total	\$264,550	\$27,869	\$5,893

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 lending commitments. See the tables in "Commitments" above for a summary of the firm's commitments.
- The carrying value for derivatives included derivative assets of \$1.58 billion as of September 2019 and \$1.48 billion as of December 2018, and derivative liabilities of \$7.48 billion as of September 2019 and \$5.59 billion as of December 2018.

**Notes to Consolidated Financial Statements
(Unaudited)**

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 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, hedge funds and certain other counterparties. Accordingly, the firm has not included such contracts in the table above. 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 \$19.80 billion as of September 2019 and \$28.75 billion as of December 2018. 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.

Notes to Consolidated Financial Statements (Unaudited)

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 consolidated statements of financial condition as of both September 2019 and December 2018.

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 consolidated statements of financial condition as of both September 2019 and December 2018.

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.

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 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 September 2019 and December 2018, 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.

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 information about common stock repurchases.

<i>in millions, except per share amounts</i>	September 2019	
	Three Months Ended	Nine Months Ended
Common share repurchases	3.1	15.7
Average cost per share	\$217.66	\$202.59
Total cost of common share repurchases	\$ 673	\$ 3,173

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 statutory employee tax withholding requirements. Under these plans, during the nine months ended September 2019, 7,490 shares were remitted with a total value of \$2 million and the firm cancelled 3.7 million share-based awards with a total value of \$739 million.

**Notes to Consolidated Financial Statements
(Unaudited)**

The table below presents common stock dividends declared.

	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Dividends declared per common share	\$1.25	\$0.80	\$2.90	\$2.35

On October 14, 2019, the Board of Directors of Group Inc. declared a dividend of \$1.25 per common share. The dividend will be paid on December 30, 2019 to common shareholders of record on December 2, 2019.

Preferred Equity

The tables below present information about the perpetual preferred stock issued and outstanding as of September 2019.

Series	Shares Authorized	Shares Issued	Shares Outstanding	Depository Shares Per Share
A	50,000	30,000	29,999	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	38,000	38,000	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
Q	20,000	20,000	20,000	25
Total	510,750	420,282	420,280	

Series	Earliest Redemption Date	Liquidation Preference	Redemption Value (\$ in millions)
A	Currently redeemable	\$ 25,000	\$ 750
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	Currently redeemable	\$ 25,000	950
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
Q	August 10, 2024	\$ 25,000	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 depository 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.
- In June 2019, Group Inc. issued 20,000 shares of Series Q 5.50% Fixed-Rate Reset Non-Cumulative Preferred Stock (Series Q Preferred Stock).

- The redemption price per share for Series A through F and Series Q 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 Series E and Series F Preferred Stock 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 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, which was recorded as an addition to preferred stock dividends in 2018.

In the second quarter of 2019, the firm issued notices that it would redeem the remaining 6,000 outstanding shares of Series B Preferred Stock with a redemption value of \$150 million (\$25,000 per share) and 14,000 of its outstanding shares of Series L 5.70% Fixed-to-Floating Rate Non-Cumulative Preferred Stock (Series L Preferred Stock) with a redemption value of \$350 million (\$25,000 per share). The difference between their redemption value and net carrying value at the time of the issuance of the firm's notices of redemption was \$7 million, which was recorded as an addition to preferred stock dividends in the second quarter of 2019. These shares were redeemed in the third quarter of 2019.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents the dividend rates of perpetual preferred stock as of September 2019.

Series	Per Annum Dividend Rate
A	3 month LIBOR + 0.75%, with floor of 3.75%, 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 + 0.7675%, 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
Q	5.50%, payable semi-annually, from issuance date to, but excluding, August 10, 2024; 5 year treasury rate + 3.623%, payable semi-annually, thereafter

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

The table below presents preferred stock dividends declared.

Series	2019		2018	
	per share	\$ in millions	per share	\$ in millions
Three Months Ended September				
A	\$ 244.79	\$ 7	\$ 239.58	\$ 7
B	\$ -	-	\$ 387.50	2
C	\$ 261.11	2	\$ 255.56	2
D	\$ 261.11	14	\$ 255.56	14
E	\$1,022.22	8	\$1,055.56	8
F	\$1,022.22	2	\$1,055.56	2
J	\$ 343.75	13	\$ 343.75	13
K	\$ 398.44	11	\$ 398.44	12
L	\$ 419.68	16	\$ -	-
N	\$ 393.75	11	\$ 393.75	11
Total		\$ 84		\$ 71
Nine Months Ended September				
A	\$ 708.34	\$ 21	\$ 710.93	\$ 21
B	\$ 775.00	5	\$1,162.50	17
C	\$ 755.55	6	\$ 758.34	6
D	\$ 755.55	41	\$ 758.34	41
E	\$3,044.44	23	\$3,077.78	24
F	\$3,044.44	5	\$3,077.78	5
J	\$1,031.25	41	\$1,031.25	41
K	\$1,195.32	33	\$1,195.32	34
L	\$1,132.18	53	\$ 712.50	37
M	\$ 671.88	54	\$ 671.88	54
N	\$1,181.25	32	\$1,181.25	32
O	\$ 662.50	17	\$ 662.50	17
P	\$ 625.00	38	\$ 656.25	39
Total		\$369		\$368

On October 11, 2019, Group Inc. declared dividends of \$239.58 per share of Series A Preferred Stock, \$255.56 per share of Series C Preferred Stock, \$255.56 per share of Series D Preferred Stock, \$343.75 per share of Series J Preferred Stock, \$398.44 per share of Series K Preferred Stock, \$387.49 per share of Series L Preferred Stock, \$671.88 per share of Series M Preferred Stock, \$393.75 per share of Series N Preferred Stock, \$662.50 per share of Series O Preferred Stock, and \$625.00 per share of Series P Preferred Stock to be paid on November 12, 2019 to preferred shareholders of record on October 28, 2019. In addition, the firm declared dividends of \$1,000.00 per each share of Series E Preferred Stock and Series F Preferred Stock to be paid on December 2, 2019 to preferred shareholders of record on November 17, 2019.

Accumulated Other Comprehensive Income/(Loss)

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

\$ in millions	Beginning balance	Other comprehensive income/(loss) adjustments, net of tax	Ending balance
Three Months Ended September 2019			
Currency translation	\$ (610)	\$ (9)	\$ (619)
Debt valuation adjustment	(221)	278	57
Pension and postretirement liabilities	(90)	(5)	(95)
Available-for-sale securities	106	67	173
Total	\$ (815)	\$ 331	\$ (484)
Three Months Ended September 2018			
Currency translation	\$ (625)	\$ (3)	\$ (628)
Debt valuation adjustment	102	(787)	(685)
Pension and postretirement liabilities	(205)	(1)	(206)
Available-for-sale securities	(230)	(90)	(320)
Total	\$ (958)	\$ (881)	\$ (1,839)
Nine Months Ended September 2019			
Currency translation	\$ (621)	\$ 2	\$ (619)
Debt valuation adjustment	1,507	(1,450)	57
Pension and postretirement liabilities	(81)	(14)	(95)
Available-for-sale securities	(112)	285	173
Total	\$ 693	\$ (1,177)	\$ (484)
Nine Months Ended September 2018			
Currency translation	\$ (625)	\$ (3)	\$ (628)
Debt valuation adjustment	(1,046)	361	(685)
Pension and postretirement liabilities	(200)	(6)	(206)
Available-for-sale securities	(9)	(311)	(320)
Total	\$ (1,880)	\$ 41	\$ (1,839)

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 repurchase shares, pay dividends and 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 requirements calculated in accordance with the Capital Framework include the minimum risk-based capital and leverage ratios. In addition, the risk-based capital requirements include the capital conservation buffer, countercyclical capital buffer and the G-SIB surcharge, all of which must consist entirely of capital that qualifies as Common Equity Tier 1 (CET1) capital.

The firm calculates its CET1 capital, 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 Advanced Capital 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 risk-based capital requirements is assessed. Under the Capital Framework, the firm is also subject to leverage requirements which consist of a minimum Tier 1 leverage ratio and a minimum supplementary leverage ratio (SLR), as well as the SLR buffer.

Consolidated Regulatory Risk-Based Capital and Leverage Ratios

The table below presents the risk-based capital and leverage requirements.

	As of	
	September 2019	December 2018
Risk-based capital requirements		
CET1 capital ratio	9.5%	8.3%
Tier 1 capital ratio	11.0%	9.8%
Total capital ratio	13.0%	11.8%
Leverage requirements		
Tier 1 leverage ratio	4.0%	4.0%
SLR	5.0%	5.0%

In the table above:

- As of September 2019, the CET1 capital ratio requirement included a minimum of 4.5%, the Tier 1 capital ratio requirement included a minimum of 6.0%, and the Total capital ratio requirement included a minimum of 8.0%. The requirements also included the capital conservation buffer of 2.5%, the G-SIB surcharge of 2.5% (Method 2) and the countercyclical capital buffer, which the FRB has set to zero percent.
- As of December 2018, the CET1 capital ratio requirement included a minimum of 4.5%, the Tier 1 capital ratio requirement included a minimum of 6.0%, and the Total capital ratio requirement included a minimum of 8.0%. The requirements also included the 75% phase-in of the capital conservation buffer of 2.5%, the 75% phase-in of the G-SIB surcharge of 2.5% (Method 2) and the countercyclical capital buffer, which the FRB has set to zero percent.
- The capital conservation buffer, countercyclical capital buffer and G-SIB surcharge phased in ratably from January 1, 2016 through January 1, 2019.
- The G-SIB surcharge is updated annually based on financial data from the prior year and is generally applicable for the following year. The G-SIB surcharge is calculated using two methodologies, the higher of which is reflected in the firm's risk-based capital requirements. The first calculation (Method 1) is based on 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 (Method 2) uses similar inputs but includes a measure of reliance on short-term wholesale funding.
- The Tier 1 leverage ratio requirement is a minimum of 4%. The SLR requirement of 5% as of both September 2019 and December 2018 includes a minimum of 3% and a 2% buffer applicable to G-SIBs.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

The table below presents information about risk-based capital ratios.

<i>\$ in millions</i>	Standardized	Advanced
As of September 2019		
CET1 capital	\$ 75,653	\$ 75,653
Tier 1 capital	\$ 86,299	\$ 86,299
Tier 2 capital	\$ 15,098	\$ 13,674
Total capital	\$101,397	\$ 99,973
RWAs	\$556,599	\$565,601
CET1 capital ratio	13.6%	13.4%
Tier 1 capital ratio	15.5%	15.3%
Total capital ratio	18.2%	17.7%
As of December 2018		
CET1 capital	\$ 73,116	\$ 73,116
Tier 1 capital	\$ 83,702	\$ 83,702
Tier 2 capital	\$ 14,926	\$ 13,743
Total capital	\$ 98,628	\$ 97,445
RWAs	\$547,910	\$558,111
CET1 capital ratio	13.3%	13.1%
Tier 1 capital ratio	15.3%	15.0%
Total capital ratio	18.0%	17.5%

In the table above, each of the risk-based capital ratios calculated in accordance with the Advanced Capital Rules was lower than that calculated in accordance with the Standardized Capital Rules and therefore the Advanced ratios were the ratios that applied to the firm as of both September 2019 and December 2018.

The table below presents information about leverage ratios.

<i>\$ in millions</i>	For the Three Months Ended or as of	
	September 2019	December 2018
Tier 1 capital	\$ 86,299	\$ 83,702
Average total assets	991,249	945,961
Deductions from Tier 1 capital	(5,482)	(4,754)
Average adjusted total assets	985,767	941,207
Average off-balance-sheet exposures	399,289	401,699
Total leverage exposure	\$1,385,056	\$1,342,906
Tier 1 leverage ratio	8.8%	8.9%
SLR	6.2%	6.2%

In the table above:

- Average total assets represents the average daily assets for the quarter.
- Average off-balance-sheet exposures represents the monthly average and consists of derivatives, securities financing transactions, commitments and guarantees.
- Tier 1 leverage ratio is calculated as Tier 1 capital divided by average adjusted total assets.
- SLR is calculated as Tier 1 capital divided by total leverage exposure.

Risk-Based Capital. The table below presents information about risk-based capital.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Common shareholders' equity	\$ 80,809	\$78,982
Deduction for goodwill	(3,528)	(3,097)
Deduction for identifiable intangible assets	(647)	(297)
Other adjustments	(981)	(2,472)
CET1 capital	75,653	73,116
Preferred stock	11,203	11,203
Deduction for investments in covered funds	(553)	(615)
Other adjustments	(4)	(2)
Tier 1 capital	\$ 86,299	\$83,702
Standardized Tier 2 and Total capital		
Tier 1 capital	\$ 86,299	\$83,702
Qualifying subordinated debt	13,124	13,147
Junior subordinated debt	332	442
Allowance for credit losses	1,675	1,353
Other adjustments	(33)	(16)
Standardized Tier 2 capital	15,098	14,926
Standardized Total capital	\$101,397	\$98,628
Advanced Tier 2 and Total capital		
Tier 1 capital	\$ 86,299	\$83,702
Standardized Tier 2 capital	15,098	14,926
Allowance for credit losses	(1,675)	(1,353)
Other adjustments	251	170
Advanced Tier 2 capital	13,674	13,743
Advanced Total capital	\$ 99,973	\$97,445

In the table above:

- Deduction for goodwill was net of deferred tax liabilities of \$668 million as of September 2019 and \$661 million as of December 2018.
- Deduction for identifiable intangible assets was net of deferred tax liabilities of \$43 million as of September 2019 and \$27 million as of December 2018.
- 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 capital 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. Other adjustments within Advanced Tier 2 capital include eligible credit reserves.
- 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

- Junior subordinated debt is debt issued to a Trust. As of September 2019, 30% of this debt was included in Tier 2 capital and 70% was phased out of regulatory capital. As of December 2018, 40% of this debt was included in Tier 2 capital and 60% was phased out of regulatory capital. Junior subordinated debt 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 and Trust Preferred securities.

The table below presents changes in CET1 capital, Tier 1 capital and Tier 2 capital.

<i>\$ in millions</i>	Standardized	Advanced
Nine Months Ended September 2019		
CET1 capital		
Beginning balance	\$ 73,116	\$73,116
Change in:		
Common shareholders' equity	1,827	1,827
Deduction for goodwill	(431)	(431)
Deduction for identifiable intangible assets	(350)	(350)
Other adjustments	1,491	1,491
Ending balance	\$ 75,653	\$75,653
Tier 1 capital		
Beginning balance	\$ 83,702	\$83,702
Change in:		
CET1 capital	2,537	2,537
Deduction for investments in covered funds	62	62
Other adjustments	(2)	(2)
Ending balance	86,299	86,299
Tier 2 capital		
Beginning balance	14,926	13,743
Change in:		
Qualifying subordinated debt	(23)	(23)
Junior subordinated debt	(110)	(110)
Allowance for credit losses	322	-
Other adjustments	(17)	64
Ending balance	15,098	13,674
Total capital	\$101,397	\$99,973

Year Ended December 2018

CET1 capital		
Beginning balance	\$ 67,110	\$67,110
Change in:		
Common shareholders' equity	8,592	8,592
Transitional provisions	(117)	(117)
Deduction for goodwill	(86)	(86)
Deduction for identifiable intangible assets	26	26
Other adjustments	(2,409)	(2,409)
Ending balance	\$ 73,116	\$73,116
Tier 1 capital		
Beginning balance	\$ 78,331	\$78,331
Change in:		
CET1 capital	6,006	6,006
Transitional provisions	13	13
Deduction for investments in covered funds	(25)	(25)
Preferred stock	(650)	(650)
Other adjustments	27	27
Ending balance	83,702	83,702
Tier 2 capital		
Beginning balance	14,977	13,899
Change in:		
Qualifying subordinated debt	(213)	(213)
Junior subordinated debt	(125)	(125)
Allowance for credit losses	275	-
Other adjustments	12	182
Ending balance	14,926	13,743
Total capital	\$ 98,628	\$97,445

Risk-Weighted Assets. RWAs are calculated in accordance with both the Standardized and Advanced Capital Rules.

Credit Risk

Credit RWAs are calculated based on measures of exposure, which are then risk weighted under the Standardized and Advanced Capital Rules:

- The Standardized Capital Rules apply prescribed risk-weights, which depend largely on the type of counterparty. The exposure measure for derivatives and securities financing transactions are based on specific formulas which take certain factors into consideration.
- Under the Advanced Capital Rules, the firm computes risk-weights for wholesale and retail credit exposures in accordance with the Advanced Internal Ratings-Based approach. The exposure measures for derivatives and securities financing transactions are computed utilizing internal models.
- For both Standardized and Advanced credit RWAs, the risk-weights for securitizations and equities are based on specific required formulaic approaches.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

Market Risk

RWAs for market risk in accordance with the Standardized and Advanced Capital Rules are generally consistent. Market RWAs are calculated based on measures of exposure which include the following:

- Value-at-Risk (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 exceeded its 99% one-day regulatory VaR on one occasion during the nine months ended September 2019 and exceeded its 99% one-day regulatory VaR on two occasions during the year ended December 2018. 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 Advanced Capital Rules. The firm utilizes an internal risk-based model to quantify Operational RWAs.

The table below presents information about RWAs.

<i>\$ in millions</i>	Standardized	Advanced
As of September 2019		
Credit RWAs		
Derivatives	\$123,787	\$ 86,759
Commitments, guarantees and loans	172,059	160,057
Securities financing transactions	70,628	18,635
Equity investments	54,802	57,106
Other	74,763	80,938
Total Credit RWAs	496,039	403,495
Market RWAs		
Regulatory VaR	8,600	8,600
Stressed VaR	27,828	27,828
Incremental risk	4,630	4,630
Comprehensive risk	1,418	964
Specific risk	18,084	18,084
Total Market RWAs	60,560	60,106
Total Operational RWAs	–	102,000
Total RWAs	\$556,599	\$565,601
As of December 2018		
Credit RWAs		
Derivatives	\$122,511	\$ 82,301
Commitments, guarantees and loans	160,305	143,356
Securities financing transactions	66,363	18,259
Equity investments	53,563	55,154
Other	70,596	69,681
Total Credit RWAs	473,338	368,751
Market RWAs		
Regulatory VaR	7,782	7,782
Stressed VaR	27,952	27,952
Incremental risk	10,469	10,469
Comprehensive risk	2,770	2,770
Specific risk	25,599	25,599
Total Market RWAs	74,572	74,572
Total Operational RWAs	–	114,788
Total RWAs	\$547,910	\$558,111

In the table above:

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

Notes to Consolidated Financial Statements (Unaudited)

The table below presents changes in RWAs.

<i>\$ in millions</i>	Standardized	Advanced
Nine Months Ended September 2019		
Risk-Weighted Assets		
Beginning balance	\$547,910	\$558,111
Credit RWAs		
Change in:		
Derivatives	1,276	4,458
Commitments, guarantees and loans	11,754	16,701
Securities financing transactions	4,265	376
Equity investments	1,239	1,952
Other	4,167	11,257
Change in Credit RWAs	22,701	34,744
Market RWAs		
Change in:		
Regulatory VaR	818	818
Stressed VaR	(124)	(124)
Incremental risk	(5,839)	(5,839)
Comprehensive risk	(1,352)	(1,806)
Specific risk	(7,515)	(7,515)
Change in Market RWAs	(14,012)	(14,466)
Change in Operational RWAs	-	(12,788)
Ending balance	\$556,599	\$565,601
Year Ended December 2018		
Risk-Weighted Assets		
Beginning balance	\$555,611	\$617,646
Credit RWAs		
Change in:		
Transitional provisions	7,766	8,232
Derivatives	(3,565)	(20,685)
Commitments, guarantees and loans	15,201	(20,019)
Securities financing transactions	(11,599)	(1,103)
Equity investments	(2,241)	(4,580)
Other	(454)	(6,411)
Change in Credit RWAs	5,108	(44,566)
Market RWAs		
Change in:		
Regulatory VaR	250	250
Stressed VaR	(4,801)	(4,801)
Incremental risk	2,028	2,028
Comprehensive risk	373	900
Specific risk	(10,659)	(10,659)
Change in Market RWAs	(12,809)	(12,282)
Change in Operational RWAs	-	(2,687)
Ending balance	\$547,910	\$558,111

RWAs Rollforward Commentary

Nine Months Ended September 2019. Standardized Credit RWAs as of September 2019 increased by \$22.70 billion compared with December 2018, primarily reflecting an increase in commitments, guarantees and loans, principally due to an increase in lending activity, an increase in securities financing transactions, principally due to increased exposures, and an increase in other credit RWAs, principally due to the recognition of operating lease right-of-use assets upon adoption of ASU No. 2016-02 and an increase in corporate debt exposures. Standardized Market RWAs as of September 2019 decreased by \$14.01 billion compared with December 2018, primarily reflecting a decrease in specific risk, principally due to reduced exposures, and a decrease in incremental risk, principally due to reduced exposures and changes in risk measurements.

Advanced Credit RWAs as of September 2019 increased by \$34.74 billion compared with December 2018, primarily reflecting an increase in commitments, guarantees and loans, principally due to an increase in lending activity, and an increase in other credit RWAs, principally due to the recognition of operating lease right-of-use assets upon adoption of ASU No. 2016-02 and an increase in corporate debt exposures. Advanced Market RWAs as of September 2019 decreased by \$14.47 billion compared with December 2018, primarily reflecting a decrease in specific risk, principally due to reduced exposures, and a decrease in incremental risk, principally due to reduced exposures and changes in risk measurements. Advanced Operational RWAs as of September 2019 decreased by \$12.79 billion compared with December 2018, reflecting the removal of certain events previously incorporated within the firm's risk-based model due to the passage of time.

Year Ended December 2018. Standardized Credit RWAs as of December 2018 increased by \$5.11 billion compared with December 2017, primarily reflecting an increase in commitments, guarantees and loans, principally due to an increase in lending activity. This increase was partially offset by a decrease in securities financing transactions, principally due to reduced exposures. Standardized Market RWAs as of December 2018 decreased by \$12.81 billion compared with December 2017, primarily reflecting a decrease in specific risk on positions for which the firm obtained increased transparency into the underliers and as a result utilized a modeled approach to calculate RWAs.

Advanced Credit RWAs as of December 2018 decreased by \$44.57 billion compared with December 2017. Beginning in the fourth quarter of 2018, the firm's default experience was incorporated into the determination of probability of default, which resulted in a decrease in credit RWAs, primarily in commitments, guarantees and loans and derivatives. Advanced Market RWAs as of December 2018 decreased by \$12.28 billion compared with December 2017, primarily reflecting a decrease in specific risk on positions for which the firm obtained increased transparency into the underliers and as a result utilized a modeled approach to calculate RWAs.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

Bank Subsidiaries

Regulatory Capital Ratios. GS Bank USA, the firm’s primary U.S. bank subsidiary, is 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 Bureau of Consumer Financial Protection, 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 risk-based capital and leverage 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 also meet the “well-capitalized” requirements in the table below.

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 capital, Tier 1 capital and Total capital ratios in accordance with both the Standardized and Advanced Capital Rules. The lower of each risk-based capital ratio calculated in accordance with the Standardized and Advanced Capital Rules is the ratio against which GS Bank USA’s compliance with its risk-based capital requirements is assessed.

The table below presents GS Bank USA’s risk-based capital, leverage and “well-capitalized” requirements.

	As of		“Well-capitalized” Requirements
	September 2019	December 2018	
Risk-based capital requirements			
CET1 capital ratio	7.0%	6.4%	6.5%
Tier 1 capital ratio	8.5%	7.9%	8.0%
Total capital ratio	10.5%	9.9%	10.0%
Leverage requirements			
Tier 1 leverage ratio	4.0%	4.0%	5.0%
SLR	3.0%	3.0%	6.0%

In the table above:

- As of September 2019, the CET1 capital ratio requirement included a minimum of 4.5%, the Tier 1 capital ratio requirement included a minimum of 6.0%, and the Total capital ratio requirement included a minimum of 8.0%. The requirements also included the capital conservation buffer of 2.5% and the countercyclical capital buffer, which the FRB has set to zero percent.
- As of December 2018, the CET1 capital ratio requirement included a minimum of 4.5%, the Tier 1 capital ratio requirement included a minimum of 6.0%, and the Total capital ratio requirement included a minimum of 8.0%. The requirements also included the 75% phase-in of the capital conservation buffer of 2.5% and the countercyclical capital buffer of zero percent.
- The “well-capitalized” requirements were the binding requirements for risk-based capital ratios as of December 2018 and were the binding requirements for leverage ratios as of both September 2019 and December 2018.

The table below presents information about GS Bank USA’s risk-based capital ratios.

<i>\$ in millions</i>	Standardized	Advanced
As of September 2019		
CET1 capital	\$ 28,688	\$ 28,688
Tier 1 capital	\$ 28,688	\$ 28,688
Tier 2 capital	\$ 5,262	\$ 4,520
Total capital	\$ 33,950	\$ 33,208
RWAs	\$255,503	\$158,755
CET1 capital ratio	11.2%	18.1%
Tier 1 capital ratio	11.2%	18.1%
Total capital ratio	13.3%	20.9%
As of December 2018		
CET1 capital	\$ 27,467	\$ 27,467
Tier 1 capital	\$ 27,467	\$ 27,467
Tier 2 capital	\$ 5,069	\$ 4,446
Total capital	\$ 32,536	\$ 31,913
RWAs	\$248,356	\$149,019
CET1 capital ratio	11.1%	18.4%
Tier 1 capital ratio	11.1%	18.4%
Total capital ratio	13.1%	21.4%

In the table above:

- Each of the risk-based capital ratios calculated in accordance with the Standardized Capital Rules was lower than that calculated in accordance with the Advanced Capital Rules and therefore the Standardized ratios were the ratios that applied to GS Bank USA as of both September 2019 and December 2018.

**Notes to Consolidated Financial Statements
(Unaudited)**

- The Standardized risk-based capital ratios increased from December 2018 to September 2019, reflecting an increase in capital, principally due to net earnings, partially offset by an increase in credit RWAs. The Advanced risk-based capital ratios decreased from December 2018 to September 2019, principally due to an increase in credit RWAs due to increased lending activity, partially offset by an increase in capital, principally due to net earnings.

The table below presents information about GS Bank USA's leverage ratios.

<i>\$ in millions</i>	For the Three Months Ended or as of	
	September 2019	December 2018
Tier 1 capital	\$ 28,688	\$ 27,467
Average adjusted total assets	\$209,363	\$188,606
Total leverage exposure	\$402,172	\$368,062
Tier 1 leverage ratio	13.7%	14.6%
SLR	7.1%	7.5%

In the table above:

- Tier 1 leverage ratio is calculated as Tier 1 capital divided by average adjusted total assets.
- SLR is calculated as Tier 1 capital divided by total leverage exposure.

The firm's principal non-U.S. bank subsidiary, GSIB, is a wholly-owned credit institution, regulated by the Prudential Regulation Authority and the Financial Conduct Authority and is subject to regulatory capital requirements. As of both September 2019 and December 2018, GSIB was in compliance with its 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 \$26.93 billion as of September 2019 and \$29.20 billion as of December 2018, which exceeded required reserve amounts by \$26.79 billion as of September 2019 and \$29.03 billion as of December 2018.

Restrictions on Payments

Group Inc. may be limited in its ability to access capital held at certain subsidiaries as a result of regulatory, tax or other constraints. These limitations include 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., dividends that may be paid by GS Bank USA are 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 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.

In addition, 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.

Group Inc.'s equity investment in subsidiaries was \$94.36 billion as of September 2019 and \$90.22 billion as of December 2018, of which Group Inc. was required to maintain \$58.55 billion as of September 2019 and \$52.92 billion as of December 2018, of minimum equity capital in its regulated subsidiaries in order to satisfy the regulatory requirements of such subsidiaries.

Group Inc.'s capital invested in certain non-U.S. subsidiaries is 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 for information about the firm's net investment hedges used to hedge this risk.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 information about basic and diluted EPS.

<i>in millions, except per share amounts</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Net earnings applicable to common shareholders	\$1,793	\$2,453	\$6,173	\$7,538
Weighted average basic shares	370.0	385.4	374.7	387.4
Effect of dilutive securities:				
RSUs	4.3	4.2	3.5	3.8
Stock options	–	0.9	–	1.1
Dilutive securities	4.3	5.1	3.5	4.9
Weighted average diluted shares	374.3	390.5	378.2	392.3
Basic EPS	\$ 4.83	\$ 6.35	\$16.43	\$19.42
Diluted EPS	\$ 4.79	\$ 6.28	\$16.32	\$19.21

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 basic EPS. The impact of applying this methodology was a reduction in basic EPS of \$0.02 for the three months ended September 2019, \$0.01 for the three months ended September 2018 and \$0.04 for both the nine months ended September 2019 and September 2018.
- Diluted EPS does not include antidilutive RSUs of less than 0.1 million for each of the three and nine months ended September 2019 and September 2018.

Note 22.

Transactions with Affiliated Funds

The firm has formed 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 information about affiliated funds.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Fees earned from funds	\$739	\$858	\$2,181	\$2,760

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Fees receivable from funds	\$ 728	\$ 610
Aggregate carrying value of interests in funds	\$5,381	\$4,994

The firm may periodically determine to waive certain management fees on selected money market funds. Management fees waived were \$11 million for both the three months ended September 2019 and September 2018, \$32 million for the nine months ended September 2019 and \$40 million for the nine months ended September 2018.

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 outstanding guarantees, as permitted under the Volcker Rule, on behalf of its funds of \$89 million as of September 2019 and \$154 million as of December 2018. Substantially all of these amounts relate to a guarantee that the firm has voluntarily provided 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 September 2019 and December 2018, 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.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 sources of interest income and interest expense.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Deposits with banks	\$ 287	\$ 371	\$ 981	\$ 1,015
Collateralized agreements	1,100	1,021	3,705	2,584
Financial instruments owned	1,909	1,715	5,731	5,163
Loans receivable	1,246	1,090	3,702	2,982
Other interest	917	864	2,697	2,467
Total interest income	5,459	5,061	16,816	14,211
Deposits	945	684	2,689	1,815
Collateralized financings	710	515	2,130	1,384
Financial instruments sold, but not yet purchased	254	413	935	1,196
Secured and unsecured borrowings:				
Short-term	190	156	500	546
Long-term	1,321	1,454	4,119	4,112
Other interest	1,031	983	3,146	2,382
Total interest expense	4,451	4,205	13,519	11,435
Net interest income	\$1,008	\$ 856	\$ 3,297	\$ 2,776

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 repurchase agreements 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

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 are included in other assets and tax liabilities are included in other liabilities.

Unrecognized Tax Benefits

The firm recognizes tax positions in the 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 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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

Jurisdiction	As of September 2019
U.S. Federal	2011
New York State and City	2011
United Kingdom	2016
Japan	2014
Hong Kong	2013

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 2019. 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 2018 tax years remain subject to post-filing review.

New York State and City examinations (excluding GS Bank USA) of 2011 through 2014 began in 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.

Management believes that this allocation provides a reasonable representation of each segment's contribution to consolidated pre-tax earnings and total assets. Transactions between segments are based on specific criteria or approximate third-party rates.

The table below presents net revenues, provision for credit losses, operating expenses and pre-tax earnings by segment.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Investment Banking				
Financial Advisory	\$ 716	\$ 916	\$ 2,379	\$ 2,306
Equity underwriting	385	432	1,138	1,331
Debt underwriting	586	632	1,843	2,181
Total Underwriting	971	1,064	2,981	3,512
Total net revenues	1,687	1,980	5,360	5,818
Operating expenses	962	1,114	3,013	3,334
Pre-tax earnings	\$ 725	\$ 866	\$ 2,347	\$ 2,484
Institutional Client Services				
FICC Client Execution	\$1,410	\$1,307	\$ 4,718	\$ 5,060
Equities client execution	681	681	2,135	2,434
Commissions and fees	728	674	2,219	2,254
Securities services	468	439	1,296	1,308
Total Equities	1,877	1,794	5,650	5,996
Total net revenues	3,287	3,101	10,368	11,056
Operating expenses	2,336	2,357	7,572	8,061
Pre-tax earnings	\$ 951	\$ 744	\$ 2,796	\$ 2,995
Investing & Lending				
Equity securities	\$ 662	\$1,111	\$ 3,050	\$ 3,461
Debt securities and loans	1,019	924	2,998	2,883
Total net revenues	1,681	2,035	6,048	6,344
Provision for credit losses	291	174	729	452
Operating expenses	969	777	3,045	2,760
Pre-tax earnings	\$ 421	\$1,084	\$ 2,274	\$ 3,132
Investment Management				
Management and other fees	\$1,457	\$1,382	\$ 4,184	\$ 4,073
Incentive fees	45	148	147	677
Transaction revenues	166	174	484	568
Total net revenues	1,668	1,704	4,815	5,318
Operating expenses	1,349	1,320	3,970	4,156
Pre-tax earnings	\$ 319	\$ 384	\$ 845	\$ 1,162
Total net revenues	\$8,323	\$8,820	\$26,591	\$28,536
Provision for credit losses	291	174	729	452
Total operating expenses	5,616	5,568	17,600	18,311
Total pre-tax earnings	\$2,416	\$3,078	\$ 8,262	\$ 9,773

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 expense to specific positions in relation to the cash generated by, or funding requirements of, such positions. Net interest is included in segment net revenues as it is consistent with how management assesses segment performance.
- Overhead expenses not directly allocable to specific segments are allocated ratably based on direct segment expenses.
- Provision for credit losses, previously reported in Investing & Lending segment net revenues, is now reported as a separate line item in the consolidated statements of earnings. Previously reported amounts have been conformed to the current presentation.

The table below presents assets by segment.

\$ in millions	As of	
	September 2019	December 2018
Investment Banking	\$ 2,446	\$ 1,748
Institutional Client Services	718,523	656,920
Investing & Lending	274,783	259,104
Investment Management	11,568	14,024
Total	\$1,007,320	\$931,796

The table below presents net interest income by segment.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Investment Banking	\$ -	\$ -	\$ -	\$ -
Institutional Client Services	175	146	803	771
Investing & Lending	751	616	2,237	1,741
Investment Management	82	94	257	264
Total	\$1,008	\$856	\$3,297	\$2,776

The table below presents depreciation and amortization expense by segment.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Investment Banking	\$ 33	\$ 28	\$ 93	\$ 85
Institutional Client Services	170	137	479	414
Investing & Lending	188	97	465	292
Investment Management	82	55	203	160
Total	\$ 473	\$317	\$1,240	\$ 951

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 total net revenues and pre-tax earnings by geographic region allocated based on the methodology referred to above.

\$ in millions	2019		2018	
Three Months Ended September				
Americas	\$ 4,941	59%	\$ 5,351	61%
Europe, Middle East and Africa	2,329	28%	2,254	25%
Asia	1,053	13%	1,215	14%
Total net revenues	\$ 8,323	100%	\$ 8,820	100%
Americas	\$ 1,164	48%	\$ 1,863	60%
Europe, Middle East and Africa	948	39%	856	28%
Asia	304	13%	359	12%
Total pre-tax earnings	\$ 2,416	100%	\$ 3,078	100%
Nine Months Ended September				
Americas	\$15,838	60%	\$17,161	60%
Europe, Middle East and Africa	7,477	28%	7,478	26%
Asia	3,276	12%	3,897	14%
Total net revenues	\$26,591	100%	\$28,536	100%
Americas	\$ 4,444	54%	\$ 5,883	60%
Europe, Middle East and Africa	2,855	34%	2,764	28%
Asia	963	12%	1,126	12%
Total pre-tax earnings	\$ 8,262	100%	\$ 9,773	100%

In the table above:

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

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

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 included in financial instruments owned.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
U.S. government and agency obligations	\$131,500	\$110,616
Percentage of total assets	13.1%	11.9%
Non-U.S. government and agency obligations	\$ 55,657	\$ 43,607
Percentage of total assets	5.5%	4.7%

In addition, the firm had \$56.60 billion as of September 2019 and \$90.47 billion as of December 2018 of cash deposits held at central banks (included in cash and cash equivalents), of which \$26.93 billion as of September 2019 and \$29.20 billion as of December 2018 was held at the Federal Reserve Bank of New York. The firm also had U.S. government obligations of \$5.06 billion as of September 2019 and \$498 million as of December 2018 that were classified as held-to-maturity and included in other assets.

As of both September 2019 and December 2018, 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.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
U.S. government and agency obligations	\$80,519	\$78,828
Non-U.S. government and agency obligations	\$82,071	\$76,745

In the table above:

- Non-U.S. government and agency obligations primarily consists 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

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 September 2019 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 \$2.9 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 the investigations and reviews described below in "Regulatory Investigations and Reviews and Related Litigation" 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.

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. Subsidiaries of the firm acted as arrangers or purchasers of approximately \$6.5 billion of debt securities of 1MDB.

On November 1, 2018, the U.S. Department of Justice (DOJ) unsealed a criminal information and guilty plea by Tim Leissner, a former participating managing director of the firm, and an indictment against Ng Chong Hwa, a former managing director of the firm, and Low Taek Jho. Leissner pleaded guilty to a two-count criminal information charging him with conspiring to launder money and conspiring to violate the U.S. Foreign Corrupt Practices Act's (FCPA) anti-bribery and internal accounting controls provisions. Low and Ng were charged in a three-count indictment with conspiring to launder money and conspiring to violate the FCPA's anti-bribery provisions. On August 28, 2018, Leissner's guilty plea was accepted by the U.S. District Court for the Eastern District of New York and Leissner was adjudicated guilty on both counts. Ng was also charged in this indictment with conspiring to violate the FCPA's internal accounting controls provisions. The charging documents state, among other things, that Leissner and Ng participated in a conspiracy to misappropriate proceeds of the 1MDB offerings for themselves and to pay bribes to various government officials to obtain and retain 1MDB business for the firm. The plea and charging documents indicate that Leissner and Ng knowingly and willfully circumvented the firm's system of internal accounting controls, in part by repeatedly lying to control personnel and internal committees that reviewed these offerings. The indictment of Ng and Low alleges that the firm's system of internal accounting controls could be easily circumvented and that the firm's business culture, particularly in Southeast Asia, at times prioritized consummation of deals ahead of the proper operation of its compliance functions. On May 6, 2019, Ng pleaded not guilty to the DOJ's criminal charges. In addition, an unnamed participating managing director of the firm is alleged to have been aware of the bribery scheme and to have agreed not to disclose this information to the firm's compliance and control personnel. That employee, who was identified as a co-conspirator, has been put on administrative leave.

**Notes to Consolidated Financial Statements
(Unaudited)**

On December 17, 2018, the Attorney General of Malaysia filed criminal charges in Malaysia against Goldman Sachs International (GSI), as the arranger of three offerings of debt securities of 1MDB, aggregating approximately \$6.5 billion in principal amount, for alleged disclosure deficiencies in the offering documents relating to, among other things, the use of proceeds for the debt securities, as well as against Goldman Sachs (Asia) LLC (GS Asia) and Goldman Sachs (Singapore) PTE (GS Singapore). Criminal charges have also been filed against Leissner, Low, Ng and Jasmine Loo Ai Swan. In a related press release, the Attorney General of Malaysia indicated that prosecutors in Malaysia will seek criminal fines against the accused in excess of \$2.7 billion plus the \$600 million of fees received in connection with the debt offerings. On August 9, 2019, the Attorney General of Malaysia announced that criminal charges had also been filed against seventeen current and former directors of GSI, GS Asia and GS Singapore.

The Malaysia Securities Commission issued notices to show cause against Goldman Sachs (Malaysia) Sdn Bhd (GS Malaysia) in December 2018 and March 2019 that (i) allege possible violations of Malaysian securities laws and (ii) indicate that the Malaysia Securities Commission is considering whether to revoke GS Malaysia's license to conduct corporate finance and fund management activities in Malaysia.

The firm has received multiple demands, beginning in November 2018, from alleged shareholders under Section 220 of the Delaware General Corporation Law for books and records relating to, among other things, the firm's involvement with 1MDB and the firm's compliance procedures.

On February 19, 2019, a purported shareholder derivative action relating to 1MDB was filed in the U.S. District Court for the Southern District of New York against Group Inc. and the directors at the time and a former chairman and chief executive officer of the firm. The amended complaint filed on July 12, 2019, which seeks unspecified damages, disgorgement and injunctive relief, alleges breaches of fiduciary duties, including in connection with alleged insider trading by certain current and former directors, unjust enrichment and violations of the anti-fraud provisions of the Exchange Act, including in connection with Group Inc.'s common stock repurchases and solicitation of proxies. Defendants moved to dismiss this action on September 12, 2019.

Beginning in March 2019, the firm has also received demands from alleged shareholders to investigate and pursue claims against certain current and former directors and executive officers based on their oversight and public disclosures regarding 1MDB and related internal controls.

On November 21, 2018, a summons with notice was filed in New York Supreme Court, County of New York, by International Petroleum Investment Company, which guaranteed certain debt securities issued by 1MDB, and its subsidiary Aabar Investments PJS. The summons with notice makes unspecified claims relating to 1MDB and seeks unspecified compensatory and punitive damages and other relief against Group Inc., GSI, GS Asia, GS Singapore, GS Malaysia, Leissner, Ng, and an employee of the firm, as well as individuals (who are not employees of the firm) formerly associated with the plaintiffs.

On December 20, 2018, a putative securities class action lawsuit was filed in the U.S. District Court for the Southern District of New York against Group Inc. and certain former officers of the firm alleging violations of the anti-fraud provisions of the Exchange Act with respect to Group Inc.'s disclosures concerning 1MDB and seeking unspecified damages. The plaintiffs filed the second amended complaint on October 28, 2019.

The firm is cooperating with the DOJ and all other governmental and regulatory investigations relating to 1MDB. The firm is also engaged in discussions with certain governmental and regulatory authorities with respect to potential resolution of their investigations. There can be no assurance that the discussions will lead to resolution of any of those matters. Any such resolution, as well as proceedings by the DOJ or other governmental or regulatory authorities, could result in the imposition of significant fines, penalties and other sanctions against the firm, including restrictions on the firm's activities.

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 collateralized debt obligation 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. The defendants have moved for summary judgment. On December 11, 2018, the Second Circuit Court of Appeals granted the defendants' petition for interlocutory review of the district court's August 14, 2018 grant of class certification. On January 23, 2019, the district court stayed proceedings pending the appellate court's decision.

**Notes to Consolidated Financial Statements
(Unaudited)**

Beginning on February 15, 2019, a summons with notice and a complaint were filed against Goldman Sachs Mortgage Company and GS Mortgage Securities Corp. by U.S. Bank National Association, as trustee for two residential mortgage-backed securitization trusts that issued \$1.7 billion of securities, and the cases are pending in the U.S. District Court for the Southern District of New York. The summons with notice and complaint generally allege that mortgage loans in the trusts failed to conform to applicable representations and warranties and seek specific performance or, alternatively, compensatory damages and other relief. Defendants moved to dismiss the complaint on September 23, 2019.

The firm continues to receive requests for information, including from certain regulators, relating to mortgage-related activities.

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 complaint alleges that excessive compensation has been paid to the non-employee director defendants since 2015, and that certain disclosures in connection with soliciting shareholder 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. On October 23, 2018, the court declined to approve the parties' proposed settlement. On May 31, 2019, the court dismissed the disclosure-related claims, but permitted the non-employee director compensation claim to proceed.

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 alleged a conspiracy to manipulate the foreign currency exchange markets and asserted claims under federal and state antitrust laws and state consumer protection laws. On March 15, 2018, the court granted defendants' motion to dismiss in its entirety, and on October 25, 2018, plaintiffs' motion for leave to replead was denied as to the claim under federal antitrust law and granted as to the claims under state antitrust and consumer protection laws. On August 5, 2019, the plaintiffs filed a third consolidated amended complaint asserting claims under various state antitrust laws and state consumer protection laws and seeking treble damages in an unspecified amount.

GS&Co. and Group Inc. are among the defendants named in an action filed in the U.S. District Court for the Southern District of New York on November 7, 2018 by certain direct purchasers of foreign exchange instruments that opted out of a class settlement reached with, among others, GS&Co. and Group Inc. The second amended complaint, filed on June 11, 2019, generally alleges that the defendants violated federal antitrust and state common laws in connection with an alleged conspiracy to manipulate the foreign currency exchange markets and seeks declaratory and injunctive relief, as well as unspecified amounts of compensatory, punitive, treble and other damages. Defendants moved to dismiss on July 25, 2019.

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.

Notes to Consolidated Financial Statements (Unaudited)

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.

Adeptus Health Inc. 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), as well as Adeptus' sponsor. As to the underwriters, the consolidated 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 \$185 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. On September 12, 2018, the defendants' motions to dismiss were granted as to the June 2014 and May 2015 offerings, but denied as to the July 2015 and June 2016 offerings. On December 7, 2018, plaintiffs moved for class certification. On February 16, 2019, plaintiffs filed a second amended consolidated complaint. On March 4, 2019, the defendants moved to dismiss the newly asserted additional misstatement and omission claims in the second amended consolidated complaint.

SunEdison, Inc. 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. The defendants also include certain of SunEdison's directors and officers. 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, plaintiffs in the putative class action filed a consolidated amended complaint. 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. On February 11, 2019, the plaintiffs' motion for class certification in the class action was granted. On April 10, 2018 and April 17, 2018, certain plaintiffs in the individual actions filed amended complaints. The defendants have reached a settlement with certain plaintiffs in the individual actions and a settlement of the class action, which the court approved on October 25, 2019. The firm has paid the full amount of its contribution to the settlement.

Valeant Pharmaceuticals International, Inc. 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. Defendants' 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.

**Notes to Consolidated Financial Statements
(Unaudited)**

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. The underwriter defendants, including GS&Co., were voluntarily dismissed from the district court action on September 18, 2018. The state court actions have been stayed.

Sea Limited. GS Asia is among the underwriters named as defendants in a putative securities class action filed on November 1, 2018 in New York Supreme Court, County of New York, relating to Sea Limited's \$989 million October 2017 initial public offering of American depository shares. In addition to the underwriters, the defendants include Sea Limited and certain of its officers and directors. GS Asia underwrote 28,026,721 American depository shares representing an aggregate offering price of approximately \$420 million. On January 25, 2019, the plaintiffs filed an amended complaint. Defendants moved to dismiss on March 26, 2019.

Altice USA, Inc. GS&Co. is among the underwriters named as defendants in putative securities class actions pending in New York Supreme Court, County of Queens and the U.S. District Court for the Eastern District of New York beginning in June 2018, relating to Altice USA, Inc.'s (Altice) \$2.15 billion June 2017 initial public offering. In addition to the underwriters, the defendants include Altice and certain of its officers and directors. GS&Co. underwrote 12,280,042 shares of common stock representing an aggregate offering price of approximately \$368 million. On May 10, 2019, plaintiffs in the district court filed an amended complaint, and on June 27, 2019, plaintiffs in the state court action filed a consolidated amended complaint. On July 23, 2019, defendants moved to dismiss the amended complaint in the state court action. On October 14, 2019, defendants moved to dismiss the complaint in the district court action.

Camping World Holdings, Inc. GS&Co. is among the underwriters named as defendants in several putative securities class actions pending in the U.S. District Court for the Northern District of Illinois, New York Supreme Court, County of New York, and the Circuit Court of Cook County, Illinois, Chancery Division, beginning in December 2018. In addition to the underwriters, the defendants include Camping World Holdings, Inc. (Camping World) and certain of its officers and directors, as well as certain of its stockholders. As to the underwriters, the complaints relate to three offerings of Camping World common stock, a \$261 million October 2016 initial public offering, a \$303 million May 2017 offering and a \$310 million October 2017 offering. GS&Co. underwrote 4,267,214 shares of common stock in the October 2016 initial public offering representing an aggregate offering price of approximately \$94 million, 4,557,286 shares of common stock in the May 2017 offering representing an aggregate offering price of approximately \$126 million and 3,525,348 shares of common stock in the October 2017 offering representing an aggregate offering price of approximately \$143 million. GS&Co. and the other defendants moved to dismiss the New York state court action on February 28, 2019, the Illinois state court action on April 19, 2019 and the Illinois district court action on May 17, 2019. The Illinois state court action has been stayed pending resolution of the motions to dismiss in the Illinois district court action.

Alnylam Pharmaceuticals, Inc. GS&Co. is among the underwriters named as defendants in a putative securities class action filed on September 12, 2019 in New York Supreme Court, County of New York, relating to Alnylam Pharmaceuticals, Inc.'s (Alnylam) \$805 million November 2017 public offering of common stock. In addition to the underwriters, the defendants include Alnylam and certain of its officers and directors. GS&Co. underwrote 2,576,000 shares of common stock representing an aggregate offering price of approximately \$322 million.

Uber Technologies, Inc. GS&Co. is among the underwriters named as defendants in a putative securities class action filed on September 25, 2019 in California Superior Court, County of San Francisco, relating to Uber Technologies, Inc.'s (Uber) \$8.1 billion May 2019 initial public offering. In addition to the underwriters, the defendants include Uber and certain of its officers and directors. GS&Co. underwrote 35,864,408 shares of common stock representing an aggregate offering price of approximately \$1.6 billion.

Notes to Consolidated Financial Statements (Unaudited)

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., 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 two antitrust actions relating to the trading of interest rate swaps, commenced in April 2016 and June 2018, respectively, in the U.S. District Court for the Southern District of New York by three operators of swap execution facilities and certain of their affiliates. These actions have been consolidated for pretrial proceedings. The complaints generally assert 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 complaints in the individual actions also assert 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 the class and the first individual action and the district court dismissed the state common law claims asserted by the plaintiffs in the first individual action and otherwise limited the state common law claim in the putative class action and the antitrust claims in both actions to the period from 2013 to 2016. On November 20, 2018, the court granted in part and denied in part the defendants' motion to dismiss the second individual action, dismissing the state common law claims for unjust enrichment and tortious interference, but denying dismissal of the federal and state antitrust claims. On March 13, 2019, the court denied the plaintiffs' motion in the putative class action to amend their complaint to add allegations related to 2008-2012 conduct, but granted the motion to add limited allegations from 2013-2016, which the plaintiffs added in a fourth consolidated amended complaint filed on March 22, 2019. The plaintiffs in the putative class action moved for class certification on March 7, 2019.

Securities Lending Antitrust Litigation

Group Inc. and GS&Co. are among the defendants named in a putative antitrust class action and three individual actions 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 and state 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 complaints also assert claims for tortious interference with business relations and under state trade practices law and, in the second and third individual actions, unjust enrichment under state common law. The complaints seek declaratory and injunctive relief, as well as unspecified amounts of compensatory, treble, punitive and other damages. Group Inc. was voluntarily dismissed from the putative class action on January 26, 2018. Defendants' motion to dismiss the class action complaint was denied on September 27, 2018. Defendants moved to dismiss the second individual action on December 21, 2018. Defendants' motion to dismiss the first individual action was granted on August 7, 2019.

GSE Bonds Antitrust Litigation

GS&Co. is among the dealers named as defendants in numerous putative antitrust class actions relating to debt securities issued by Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, Federal Farm Credit Banks Funding Corporation and Federal Home Loan Banks (collectively, the GSEs), filed beginning in February 2019 and consolidated in the U.S. District Court for the Southern District of New York. The third consolidated amended complaint, filed on September 10, 2019, asserts claims under federal antitrust law in connection with an alleged conspiracy among the defendants to manipulate the secondary market for debt securities issued by the GSEs. The complaint seeks declaratory and injunctive relief, as well as treble damages in unspecified amounts. Beginning in September 2019, the State of Louisiana and the City of Baton Rouge filed complaints in the U.S. District Court for the Middle District of Louisiana against the class defendants and a number of dealers alleging the same claims as in the class action. On October 2, 2019, the firm and class plaintiffs reached a settlement in principle, subject to documentation and court approval. The firm has reserved the full amount of its proposed contribution to the settlement.

Notes to Consolidated Financial Statements (Unaudited)

Variable Rate Demand Obligations Antitrust Litigation

GS&Co. is among the defendants named in a putative class action relating to variable rate demand obligations (VRDOs), filed beginning in February 2019 under separate complaints and consolidated in the U.S. District Court for the Southern District of New York. The consolidated amended complaint, filed on May 31, 2019, generally asserts claims under federal antitrust law and state common law in connection with an alleged conspiracy among the defendants to manipulate the market for VRDOs. The complaint seeks declaratory and injunctive relief, as well as unspecified amounts of compensatory, treble and other damages. Defendants moved to dismiss on July 30, 2019.

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.

GS&Co., GSI, J. Aron & Company and Metro, a previously consolidated subsidiary of Group Inc. that was sold in the fourth quarter of 2014, are among the defendants in a number of putative class and individual actions filed beginning on August 1, 2013 and consolidated in the U.S. District Court for the Southern District of New York. The complaints generally allege violations of federal antitrust laws and state laws in connection with the storage of aluminum and aluminum trading. The complaints seek declaratory, injunctive and other equitable relief, as well as unspecified monetary damages, including treble damages. In December 2016, the district court granted defendants' motions to dismiss as to all remaining claims. Certain plaintiffs subsequently appealed in December 2016. On August 27, 2019, the Second Circuit vacated the district court's dismissals and remanded the case to district court for further proceedings.

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. 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. The complaint, as subsequently amended, alleges that Group Inc. and GS&Co. have systematically discriminated against female employees in respect of compensation, promotion 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 March 30, 2018, the district court certified a damages class as to the plaintiffs' disparate impact and treatment claims. On September 4, 2018, the Second Circuit Court of Appeals denied defendants' petition for interlocutory review of the district court's class certification decision and subsequently denied defendants' petition for rehearing. On September 27, 2018, plaintiffs advised the district court that they would not seek to certify a class for injunctive and declaratory relief. On April 12, 2019, Group Inc. and GS&Co. filed a motion to compel arbitration as to certain class members who are parties to agreements with Group Inc. and/or GS&Co. in which they agreed to arbitrate employment-related disputes, and plaintiffs filed a motion challenging the enforceability of arbitration agreements executed after the filing of the class action.

**Notes to Consolidated Financial Statements
(Unaudited)**

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 applicable short sale rules, 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 FCPA;
- 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 Interim Financial Statements

We have reviewed the accompanying consolidated statement of financial condition of The Goldman Sachs Group, Inc. and its subsidiaries (the Company) as of September 30, 2019, the related consolidated statements of earnings, comprehensive income and changes in shareholders' equity for the three and nine month periods ended September 30, 2019 and 2018, and the consolidated statements of cash flows for the nine month periods ended September 30, 2019 and 2018, 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, 2018, 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 25, 2019, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated statement of financial condition as of December 31, 2018 is fairly stated in all material respects in relation to the consolidated statement of financial condition 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
October 31, 2019

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Statistical Disclosures

Distribution of Assets, Liabilities and Shareholders' Equity

The tables below present information about average balances, interest and average interest rates.

\$ in millions	Average Balance for the			
	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Assets				
U.S.	\$ 35,782	\$ 63,615	\$ 41,812	\$ 67,303
Non-U.S.	50,052	50,732	49,360	51,762
Total deposits with banks	85,834	114,347	91,172	119,065
U.S.	160,702	167,614	164,461	162,303
Non-U.S.	124,061	136,522	125,995	144,097
Total collateralized agreements	284,763	304,136	290,456	306,400
U.S.	204,430	174,417	190,859	165,141
Non-U.S.	140,969	122,465	132,866	122,850
Total financial instruments owned	345,399	296,882	323,725	287,991
U.S.	74,204	69,268	74,419	66,140
Non-U.S.	11,861	6,644	9,800	6,440
Total loans receivable	86,065	75,912	84,219	72,580
U.S.	48,058	41,112	45,051	45,157
Non-U.S.	38,910	40,486	36,855	44,669
Total other interest-earning assets	86,968	81,598	81,906	89,826
Total interest-earning assets	889,029	872,875	871,478	875,862
Cash and due from banks	12,196	10,247	10,638	12,011
Other non-interest-earning assets	90,024	84,418	84,854	87,149
Total assets	\$991,249	\$967,540	\$966,970	\$975,022
Liabilities				
U.S.	\$133,165	\$120,083	\$128,396	\$115,544
Non-U.S.	36,121	28,844	33,540	30,124
Total interest-bearing deposits	169,286	148,927	161,936	145,668
U.S.	72,348	54,986	62,416	62,124
Non-U.S.	30,572	44,456	32,715	47,166
Total collateralized financings	102,920	99,442	95,131	109,290
U.S.	31,883	33,388	30,794	34,652
Non-U.S.	44,864	46,457	46,115	49,730
Total financial instruments sold, but not yet purchased	76,747	79,845	76,909	84,382
U.S.	37,167	38,635	34,977	41,159
Non-U.S.	17,719	17,874	16,711	17,217
Total short-term borrowings	54,886	56,509	51,688	58,376
U.S.	205,336	217,071	206,889	213,659
Non-U.S.	28,027	25,449	28,438	23,063
Total long-term borrowings	233,363	242,520	235,327	236,722
U.S.	129,656	126,754	129,398	124,087
Non-U.S.	54,715	62,972	54,402	65,933
Total other interest-bearing liabilities	184,371	189,726	183,800	190,020
Total interest-bearing liabilities	821,573	816,969	804,791	824,458
Non-interest-bearing deposits	5,758	4,554	5,346	4,176
Other non-interest-bearing liabilities	72,864	59,769	66,568	62,006
Total liabilities	900,195	881,292	876,705	890,640
Shareholders' equity				
Preferred stock	11,203	11,203	11,203	11,268
Common stock	79,851	75,045	79,062	73,114
Total shareholders' equity	91,054	86,248	90,265	84,382
Total liabilities and shareholders' equity	\$991,249	\$967,540	\$966,970	\$975,022
Percentage of interest-earning assets and interest-bearing liabilities attributable to non-U.S. operations				
Assets	41.15%	40.88%	40.72%	42.22%
Liabilities	25.81%	27.67%	26.33%	28.29%

\$ in millions	Interest for the			
	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Assets				
U.S.	\$ 208	\$ 318	\$ 746	\$ 899
Non-U.S.	79	53	235	116
Total deposits with banks	287	371	981	1,015
U.S.	981	883	3,324	2,196
Non-U.S.	119	138	381	388
Total collateralized agreements	1,100	1,021	3,705	2,584
U.S.	1,164	1,102	3,603	3,269
Non-U.S.	745	613	2,128	1,894
Total financial instruments owned	1,909	1,715	5,731	5,163
U.S.	1,074	972	3,246	2,673
Non-U.S.	172	118	456	309
Total loans receivable	1,246	1,090	3,702	2,982
U.S.	635	616	1,871	1,757
Non-U.S.	282	248	826	710
Total other interest-earning assets	917	864	2,697	2,467
Total interest-earning assets	\$5,459	\$5,061	\$16,816	\$14,211
Liabilities				
U.S.	\$ 819	\$ 616	\$ 2,357	\$ 1,614
Non-U.S.	126	68	332	201
Total interest-bearing deposits	945	684	2,689	1,815
U.S.	635	427	1,902	1,160
Non-U.S.	75	88	228	224
Total collateralized financings	710	515	2,130	1,384
U.S.	63	205	373	613
Non-U.S.	191	208	562	583
Total financial instruments sold, but not yet purchased	254	413	935	1,196
U.S.	186	149	483	529
Non-U.S.	4	7	17	17
Total short-term borrowings	190	156	500	546
U.S.	1,286	1,431	4,043	4,053
Non-U.S.	35	23	76	59
Total long-term borrowings	1,321	1,454	4,119	4,112
U.S.	1,010	792	3,401	2,174
Non-U.S.	21	191	(255)	208
Total other interest-bearing liabilities	1,031	983	3,146	2,382
Total interest-bearing liabilities	\$4,451	\$4,205	\$13,519	\$11,435
Net interest income				
U.S.	\$ 63	\$ 271	\$ 231	\$ 651
Non-U.S.	945	585	3,066	2,125
Net interest income	\$1,008	\$ 856	\$ 3,297	\$ 2,776

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Statistical Disclosures

	Annualized Average Rate for the			
	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Assets				
U.S.	2.26%	1.98%	2.39%	1.79%
Non-U.S.	0.61%	0.41%	0.64%	0.30%
Total deposits with banks	1.30%	1.29%	1.44%	1.14%
U.S.	2.37%	2.09%	2.70%	1.81%
Non-U.S.	0.37%	0.40%	0.40%	0.36%
Total collateralized agreements	1.50%	1.33%	1.71%	1.13%
U.S.	2.21%	2.51%	2.52%	2.65%
Non-U.S.	2.05%	1.99%	2.14%	2.06%
Total financial instruments owned	2.15%	2.29%	2.37%	2.40%
U.S.	5.62%	5.57%	5.83%	5.40%
Non-U.S.	5.63%	7.05%	6.22%	6.42%
Total loans receivable	5.62%	5.70%	5.88%	5.49%
U.S.	5.13%	5.94%	5.55%	5.20%
Non-U.S.	2.81%	2.43%	3.00%	2.13%
Total other interest-earning assets	4.09%	4.20%	4.40%	3.67%
Total interest-earning assets	2.38%	2.30%	2.58%	2.17%
Liabilities				
U.S.	2.39%	2.04%	2.45%	1.87%
Non-U.S.	1.35%	0.94%	1.32%	0.89%
Total interest-bearing deposits	2.17%	1.82%	2.22%	1.67%
U.S.	3.41%	3.08%	4.07%	2.50%
Non-U.S.	0.95%	0.79%	0.93%	0.63%
Total collateralized financings	2.68%	2.05%	2.99%	1.69%
U.S.	0.77%	2.44%	1.62%	2.37%
Non-U.S.	1.65%	1.78%	1.63%	1.57%
Total financial instruments sold, but not yet purchased	1.29%	2.05%	1.63%	1.90%
U.S.	1.94%	1.53%	1.85%	1.72%
Non-U.S.	0.09%	0.16%	0.14%	0.13%
Total short-term borrowings	1.34%	1.10%	1.29%	1.25%
U.S.	2.43%	2.62%	2.61%	2.54%
Non-U.S.	0.48%	0.36%	0.36%	0.34%
Total long-term borrowings	2.20%	2.38%	2.34%	2.32%
U.S.	3.02%	2.48%	3.51%	2.34%
Non-U.S.	0.15%	1.20%	(0.63)%	0.42%
Total other interest-bearing liabilities	2.17%	2.06%	2.29%	1.68%
Total interest-bearing liabilities	2.10%	2.04%	2.25%	1.85%
Interest rate spread	0.28%	0.26%	0.33%	0.32%
U.S.	0.05%	0.21%	0.06%	0.17%
Non-U.S.	1.00%	0.65%	1.16%	0.77%
Net yield on interest-earning assets	0.44%	0.39%	0.51%	0.42%

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.
- 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 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 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 “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” 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, 2018. References to “the 2018 Form 10-K” are to our Annual Report on Form 10-K for the year ended December 31, 2018. References to “this Form 10-Q” are to our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2019. All references to “the consolidated financial statements” or “Statistical Disclosures” are to Part I, Item 1 of this Form 10-Q. The consolidated financial statements are unaudited. All references to September 2019, June 2019 and September 2018 refer to our periods ended, or the dates, as the context requires, September 30, 2019, June 30, 2019 and September 30, 2018, respectively. All references to December 2018 refer to the date December 31, 2018. 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

Three Months Ended September 2019 versus September 2018. We generated net earnings of \$1.88 billion for the third quarter of 2019, a decrease of 26%, compared with \$2.52 billion for the third quarter of 2018. Diluted earnings per common share was \$4.79 for the third quarter of 2019, a decrease of 24%, compared with \$6.28 for the third quarter of 2018. Annualized return on average common shareholders' equity (ROE) was 9.0% for the third quarter of 2019, compared with 13.1% for the third quarter of 2018. Book value per common share was \$218.82 as of September 2019, 2.2% higher compared with June 2019 and 10.9% higher compared with September 2018.

Net revenues were \$8.32 billion for the third quarter of 2019, 6% lower than the third quarter of 2018, primarily reflecting lower net revenues in Investing & Lending, due to significantly lower net revenues in equity securities, and Investment Banking, primarily due to significantly lower net revenues in Financial Advisory. These decreases were partially offset by higher net revenues in Institutional Client Services, across both Fixed Income, Currency and Commodities (FICC) Client Execution and Equities.

Provision for credit losses was \$291 million for the third quarter of 2019, 67% higher than the third quarter of 2018, primarily reflecting higher impairments.

Operating expenses were \$5.62 billion for the third quarter of 2019, essentially unchanged compared with the third quarter of 2018, primarily reflecting higher expenses for consolidated investments and higher brokerage, clearing, exchange and distribution fees, largely offset by lower compensation and benefits expenses.

We returned \$1.14 billion of capital to common shareholders during the third quarter of 2019, including \$673 million of common share repurchases and \$466 million of common stock dividends. As of September 2019, our Common Equity Tier 1 (CET1) capital ratio as calculated in accordance with the Standardized Capital Rules was 13.6% and as calculated in accordance with the Advanced Capital Rules was 13.4%. See Note 20 to the consolidated financial statements for further information about our capital ratios.

Nine Months Ended September 2019 versus September 2018. We generated net earnings of \$6.55 billion for the first nine months of 2019, a decrease of 17%, compared with \$7.92 billion for the first nine months of 2018. Diluted earnings per common share was \$16.32 for the first nine months of 2019, a decrease of 15%, compared with \$19.21 for the first nine months of 2018. Annualized ROE was 10.4% for the first nine months of 2019, compared with 13.7% for the first nine months of 2018. Book value per common share as of September 2019 was 5.5% higher compared with December 2018.

Net revenues were \$26.59 billion for the first nine months of 2019, 7% lower than the first nine months of 2018, reflecting lower net revenues across all segments. Net revenues were lower in Institutional Client Services, across both Equities and FICC Client Execution, and Investment Management, primarily due to significantly lower incentive fees. In addition, net revenues were lower in Investment Banking, due to lower net revenues in Underwriting, and Investing & Lending, reflecting lower net revenues in equity securities.

Provision for credit losses was \$729 million for the first nine months of 2019, 61% higher than the first nine months of 2018, primarily reflecting higher impairments and higher provisions related to consumer loans.

Operating expenses were \$17.60 billion for the first nine months of 2019, 4% lower than the first nine months of 2018, due to lower compensation and benefits expenses and lower net provisions for litigation and regulatory proceedings, partially offset by higher expenses related to consolidated investments, technology and our credit card activities.

Pre-tax earnings were \$8.26 billion for the first nine months of 2019 and included our investments in our digital platform, *Marcus: by Goldman Sachs* (Marcus), our credit card activities, and the planned launch of our transaction banking activities, which collectively had a pre-tax loss of approximately \$450 million.

We returned \$4.26 billion of capital to common shareholders during the first nine months of 2019, including \$3.17 billion of common share repurchases and \$1.09 billion of common stock dividends.

Business Environment

During the third quarter of 2019, global real gross domestic product (GDP) growth appeared to decrease compared with the second quarter of 2019, reflecting decreased growth in both emerging markets and advanced economies, including in the U.S. Continued concerns about future global growth and a mixed macroeconomic environment led to accommodative monetary policies by global central banks, including two cuts to the federal funds rate by the U.S. Federal Reserve during the quarter to a target range of 1.75% to 2.00%. The market sentiment in the third quarter was also impacted by continued geopolitical uncertainty, including ongoing trade concerns between the U.S. and China, the approaching deadline related to the U.K.'s decision to leave the E.U. (Brexit), turmoil in Argentina and a temporary spike in oil prices. See "Results of Operations — Segment Operating Results" for further information about the operating environment for each of our business segments during the quarter.

Critical Accounting Policies

Fair Value

Fair Value Hierarchy. Financial instruments owned and financial instruments sold, but not yet purchased (i.e., inventory), and certain other financial assets and financial liabilities, are included in our consolidated statements of financial condition at fair value (i.e., marked-to-market), with related gains or losses generally recognized in our 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. Level 3 financial assets represented 2.3% as of September 2019, and 2.4% as of both June 2019 and December 2018, of our total assets. See Notes 5 through 8 to the 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 independent risk oversight and control 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 risk oversight and control 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 consolidated financial statements for further information about fair value measurements.

Review of Net Revenues. Independent risk oversight and control 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), 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 implementation. Models are reviewed 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 2018, 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 nine months ended September 2019 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 September 2019. See Note 13 to the consolidated financial statements for further information about 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, our performance or our common stock price, or additional increases in capital requirements, our goodwill could be impaired 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 consolidated financial statements for further information about identifiable intangible assets.

Recent Accounting Developments

See Note 3 to the 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 the allowance for credit losses on loans receivable and lending commitments held for investment, provisions for losses that may arise from litigation and regulatory proceedings (including governmental investigations), 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 year-end 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.

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

We also 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 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.

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 consolidated financial statements for further information about income taxes.

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 2018 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.

<i>\$ in millions, except per share amounts</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Net revenues	\$8,323	\$8,820	\$26,591	\$28,536
Pre-tax earnings	\$2,416	\$3,078	\$ 8,262	\$ 9,773
Net earnings	\$1,877	\$2,524	\$ 6,549	\$ 7,921
Net earnings applicable to common shareholders	\$1,793	\$2,453	\$ 6,173	\$ 7,538
Diluted earnings per common share	\$ 4.79	\$ 6.28	\$ 16.32	\$ 19.21
Annualized ROE	9.0%	13.1%	10.4%	13.7%
Annualized ROTE	9.5%	13.8%	11.0%	14.6%
Annualized net earnings to average total assets	0.8%	1.0%	0.9%	1.1%
Annualized return on average total shareholders' equity	8.2%	11.7%	9.7%	12.5%
Average total shareholders' equity to average total assets	9.2%	8.9%	9.3%	8.7%
Dividend payout ratio	26.1%	12.7%	17.8%	12.2%

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. Tangible common shareholders' equity is calculated as total shareholders' equity less preferred stock, goodwill and identifiable intangible assets. Annualized return on average tangible common shareholders' equity (ROTE) is calculated by dividing annualized net earnings applicable to common shareholders by average monthly tangible common shareholders' equity. We believe that tangible common shareholders' equity is meaningful because it is a measure that we and investors use to assess capital adequacy and that ROTE is meaningful because it measures the performance of businesses consistently, whether they were acquired or developed internally. Tangible common shareholders' equity and ROTE are non-GAAP measures and may not be comparable to similar non-GAAP measures used by other companies. 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 equity and the reconciliation of average common shareholders' equity to average tangible common shareholders' equity.

<i>\$ in millions</i>	Average for the			
	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Total shareholders' equity	\$ 91,054	\$ 86,248	\$ 90,265	\$ 84,382
Preferred stock	(11,203)	(11,203)	(11,203)	(11,268)
Common shareholders' equity	79,851	75,045	79,062	73,114
Goodwill and identifiable intangible assets	(4,704)	(4,105)	(4,347)	(4,090)
Tangible common shareholders' equity	\$ 75,147	\$ 70,940	\$ 74,715	\$ 69,024

Net Revenues

The table below presents our net revenues by line item.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Investment banking	\$1,687	\$1,980	\$ 5,360	\$ 5,818
Investment management	1,556	1,580	4,469	4,947
Commissions and fees	758	704	2,308	2,361
Market making	2,384	2,281	7,346	8,031
Other principal transactions	930	1,419	3,811	4,603
Total non-interest revenues	7,315	7,964	23,294	25,760
Interest income	5,459	5,061	16,816	14,211
Interest expense	4,451	4,205	13,519	11,435
Net interest income	1,008	856	3,297	2,776
Total net revenues	\$8,323	\$8,820	\$26,591	\$28,536

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. Provision for credit losses, previously reported in other principal transactions revenues, is now reported as a separate line item in the consolidated statements of earnings. Previously reported amounts have been conformed to the current presentation.

Operating Environment. During the third quarter of 2019, market-making activities operated in an environment generally characterized by macroeconomic concerns, driven by continued trade tensions and concerns over a slowdown in future global economic growth. Volatility in equity markets increased in August and the average daily VIX for the quarter was slightly higher compared with the second quarter of 2019. In addition, monetary policies set by global central banks remained accommodative. Investment banking activities reflected decreases in industry-wide completed mergers and acquisitions transactions and industry-wide equity and debt underwriting transactions. Our assets under supervision increased from acquisitions, organic net inflows and appreciation in our client assets, reflecting generally higher fixed income prices. Global equity markets generally ended the quarter essentially unchanged after markets rebounded in September following declines in August.

If macroeconomic concerns continue, or if market-making activity levels decline, or volatility declines, or if investment banking transaction levels continue to decline, or if assets under supervision decline, or if global equity markets decline, net revenues would likely be negatively impacted. See "Segment Operating Results" for information about the operating environment and material trends and uncertainties that may impact our results of operations.

Three Months Ended September 2019 versus September 2018

Net revenues in the consolidated statements of earnings were \$8.32 billion for the third quarter of 2019, 6% lower than the third quarter of 2018, primarily due to significantly lower other principal transactions revenues and lower investment banking revenues, partially offset by higher net interest income and slightly higher market making revenues.

Non-Interest Revenues. Investment banking revenues in the consolidated statements of earnings were \$1.69 billion for the third quarter of 2019, 15% lower than the third quarter of 2018. Revenues in financial advisory were significantly lower compared with a strong third quarter of 2018, reflecting a decrease in completed mergers and acquisitions transactions. Revenues in underwriting were lower, due to lower revenues in equity underwriting, reflecting a significant decline in industry-wide initial public offerings, and in debt underwriting, reflecting a decrease in industry-wide leveraged finance transactions.

Investment management revenues in the consolidated statements of earnings were \$1.56 billion for the third quarter of 2019, 2% lower than the third quarter of 2018, due to significantly lower incentive fees. This decrease was partially offset by higher management and other fees (including the impact of the acquisition of United Capital Financial Partners, Inc. (United Capital)), reflecting higher average assets under supervision, partially offset by a lower average effective fee due to shifts in the mix of client assets and strategies.

Commissions and fees in the consolidated statements of earnings were \$758 million for the third quarter of 2019, 8% higher than the third quarter of 2018, reflecting increased client activity. Changes in cash equity market volumes were mixed compared with the third quarter of 2018, including higher volumes in the U.S. and lower volumes in Europe.

Market making revenues in the consolidated statements of earnings were \$2.38 billion for the third quarter of 2019, 5% higher than the third quarter of 2018, primarily reflecting significantly higher revenues in credit products and higher revenues in interest rate products, equity products and commodities, partially offset by significantly lower revenues in currencies.

Other principal transactions revenues in the consolidated statements of earnings were \$930 million for the third quarter of 2019, 34% lower than the third quarter of 2018, reflecting significantly lower net gains from investments in private equities, as well as net losses from investments in public equities.

Net Interest Income. Net interest income in the consolidated statements of earnings was \$1.01 billion for the third quarter of 2019, 18% higher than the third quarter of 2018, reflecting an increase in interest income primarily related to financial instruments owned reflecting the impact of higher average balances, partially offset by lower yields, and loans receivable reflecting the impact of higher average balances. The increase in interest income was partially offset by higher interest expense primarily related to deposits reflecting the impact of higher average balances and higher interest rates. See “Statistical Disclosures — Distribution of Assets, Liabilities and Shareholders’ Equity” for further information about our sources of net interest income.

Nine Months Ended September 2019 versus September 2018

Net revenues in the consolidated statements of earnings were \$26.59 billion for the first nine months of 2019, 7% lower than the first nine months of 2018, reflecting lower net revenues across all line items within non-interest revenues, partially offset by higher net interest income.

Non-Interest Revenues. Investment banking revenues in the consolidated statements of earnings were \$5.36 billion for the first nine months of 2019, 8% lower compared with a strong first nine months of 2018, due to lower revenues in debt underwriting, primarily reflecting a significant decrease in industry-wide leveraged finance activity, and equity underwriting, reflecting a significant decline in industry-wide initial public offerings. Revenues in financial advisory were slightly higher.

Investment management revenues in the consolidated statements of earnings were \$4.47 billion for the first nine months of 2019, 10% lower than the first nine months of 2018, primarily due to significantly lower incentive fees. In addition, transaction revenues were lower. These decreases were partially offset by slightly higher management and other fees (including the impact of the acquisition of United Capital), reflecting higher average assets under supervision, partially offset by a lower average effective fee due to shifts in the mix of client assets and strategies.

Commissions and fees in the consolidated statements of earnings were \$2.31 billion for the first nine months of 2019, 2% lower than the first nine months of 2018.

Market making revenues in the consolidated statements of earnings were \$7.35 billion for the first nine months of 2019, 9% lower than the first nine months of 2018, primarily reflecting significantly lower revenues in currencies and mortgages, and lower revenues in equity products and credit products, partially offset by significantly higher revenues in interest rate products.

Other principal transactions revenues in the consolidated statements of earnings were \$3.81 billion for the first nine months of 2019, 17% lower than the first nine months of 2018, reflecting lower net gains from investments in private equities and significantly lower net gains from investments in debt instruments, partially offset by significantly higher net gains from investments in public equities.

Net Interest Income. Net interest income in the consolidated statements of earnings was \$3.30 billion for the first nine months of 2019, 19% higher than the first nine months of 2018, reflecting an increase in interest income primarily related to collateralized agreements reflecting the impact of higher interest rates, as well as loans receivable and financial instruments owned, both reflecting the impact of higher average balances. The increase in interest income was partially offset by higher interest expense primarily related to deposits, other interest-bearing liabilities, and collateralized financings, each reflecting the impact of higher interest rates. See “Statistical Disclosures — Distribution of Assets, Liabilities and Shareholders’ Equity” for further information about our sources of net interest income.

Provision for Credit Losses

Provision for credit losses consists of provision for credit losses on loans receivable and lending commitments held for investment. See Note 9 to the consolidated financial statements for further information about the provision for credit losses.

The table below presents our provision for credit losses.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Provision for credit losses	\$291	\$174	\$729	\$452

Three Months Ended September 2019 versus September 2018. Provision for credit losses in the consolidated statements of earnings was \$291 million for the third quarter of 2019, 67% higher than the third quarter of 2018, primarily reflecting higher impairments.

Nine Months Ended September 2019 versus September 2018. Provision for credit losses in the consolidated statements of earnings was \$729 million for the first nine months of 2019, 61% higher than the first nine months of 2018, primarily reflecting higher impairments and higher provisions related to consumer loans.

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.

The table below presents our operating expenses by line item and headcount.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Compensation and benefits	\$ 2,731	\$ 3,019	\$ 9,307	\$10,471
Brokerage, clearing, exchange and distribution fees	853	714	2,438	2,370
Market development	169	167	539	532
Communications and technology	283	250	859	761
Depreciation and amortization	473	317	1,240	951
Occupancy	252	203	711	594
Professional fees	350	310	950	897
Other expenses	505	588	1,556	1,735
Total operating expenses	\$ 5,616	\$ 5,568	\$17,600	\$18,311
Headcount at period-end	37,800	36,300		

In the table above, headcount consists of our employees, and excludes consultants and temporary staff previously reported as part of total staff. As a result, expenses related to these consultants and temporary staff are now reported in professional fees. Previously such amounts were reported in compensation and benefits. Reclassifications have been made to previously reported amounts to conform to the current presentation.

See "Use of Estimates" for further information about estimates made in connection with discretionary compensation accruals and litigation and regulatory proceedings.

Three Months Ended September 2019 versus September 2018. Operating expenses in the consolidated statements of earnings were \$5.62 billion for the third quarter of 2019, essentially unchanged compared with the third quarter of 2018. Our efficiency ratio (total operating expenses divided by total net revenues) for the third quarter of 2019 was 67.5%, compared with 63.1% for the third quarter of 2018.

Operating expenses, compared with the third quarter of 2018, reflected higher expenses for consolidated investments (increase was primarily in depreciation and amortization, occupancy and other expenses) and higher brokerage, clearing, exchange and distribution fees, reflecting an increase in activity levels. In addition, the third quarter of 2019 included higher expenses related to technology and our credit card activities (increases were primarily in depreciation and amortization, communications and technology, professional fees and other expenses) and also included expenses related to United Capital. These increases were offset by lower compensation and benefits expenses and lower net provisions for litigation and regulatory proceedings.

Net provisions for litigation and regulatory proceedings for the third quarter of 2019 were \$47 million compared with \$136 million for the third quarter of 2018.

Headcount increased 6% compared with June 2019, primarily reflecting the timing of campus hires and the acquisition of United Capital.

Nine Months Ended September 2019 versus September 2018. Operating expenses in the consolidated statements of earnings were \$17.60 billion for the first nine months of 2019, 4% lower than the first nine months of 2018. Our efficiency ratio (total operating expenses divided by total net revenues) for the first nine months of 2019 was 66.2%, compared with 64.2% for the first nine months of 2018.

The decrease in operating expenses compared with the first nine months of 2018 was due to lower compensation and benefits expenses, reflecting a decline in operating performance, and lower net provisions for litigation and regulatory proceedings. These decreases were partially offset by higher expenses related to consolidated investments and technology (increases were primarily in depreciation and amortization, occupancy, communications and technology, and other expenses), as well as higher expenses related to our credit card activities (increase was primarily in professional fees and other expenses).

Net provisions for litigation and regulatory proceedings for the first nine months of 2019 were \$150 million compared with \$328 million for the first nine months of 2018.

Headcount increased 3% compared with December 2018.

Provision for Taxes

The effective income tax rate for the first nine months of 2019 was 20.7%, up from the full year tax rate of 16.2% for 2018, which included a \$487 million income tax benefit in 2018 related to the finalization of the impact of the Tax Cuts and Jobs Act (Tax Legislation). The increase compared with 20.1% for the first half of 2019 was primarily due to a decrease in the impact of permanent tax benefits in the first nine months of 2019 compared with the first half of 2019.

Tax Legislation reduced the U.S. corporate tax rate to 21%, 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% of total deductible expenses to certain foreign subsidiaries. GILTI is effectively a 10.5% tax, before allowable credits for foreign taxes paid, on the annual taxable income of certain foreign subsidiaries. Income tax expense associated with GILTI is recognized as incurred. In June 2019, the U.S. Internal Revenue Service (IRS) and the U.S. Department of the Treasury (U.S. Treasury) released final, temporary and proposed regulations relating to the implementation of GILTI. The final and temporary regulations did not have a material impact on our effective income tax rate for the first nine months of 2019 and the proposed regulations would be applicable only after final regulations are published. In 2018, the IRS and U.S. Treasury issued proposed regulations relating to BEAT and GILTI. The effective income tax rate for the first nine months of 2019 includes estimates for BEAT and GILTI that are based on our current interpretation of these proposed regulations. We do not expect that the finalization of these proposed regulations will have a material impact on these estimates. However, it is possible that these estimates are materially impacted if the final regulations differ significantly from our current interpretation of the proposed regulations.

Based on our current interpretations of the rules and legislative guidance to date, we expect our 2019 tax rate to be approximately 22%.

Segment Operating Results

The table below presents our net revenues, provision for credit losses, operating expenses and pre-tax earnings by segment.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Investment Banking				
Net revenues	\$1,687	\$1,980	\$ 5,360	\$ 5,818
Operating expenses	962	1,114	3,013	3,334
Pre-tax earnings	\$ 725	\$ 866	\$ 2,347	\$ 2,484
Institutional Client Services				
Net revenues	\$3,287	\$3,101	\$10,368	\$11,056
Operating expenses	2,336	2,357	7,572	8,061
Pre-tax earnings	\$ 951	\$ 744	\$ 2,796	\$ 2,995
Investing & Lending				
Net revenues	\$1,681	\$2,035	\$ 6,048	\$ 6,344
Provision for credit losses	291	174	729	452
Operating expenses	969	777	3,045	2,760
Pre-tax earnings	\$ 421	\$1,084	\$ 2,274	\$ 3,132
Investment Management				
Net revenues	\$1,668	\$1,704	\$ 4,815	\$ 5,318
Operating expenses	1,349	1,320	3,970	4,156
Pre-tax earnings	\$ 319	\$ 384	\$ 845	\$ 1,162
Total net revenues	\$8,323	\$8,820	\$26,591	\$28,536
Provision for credit losses	291	174	729	452
Total operating expenses	5,616	5,568	17,600	18,311
Total pre-tax earnings	\$2,416	\$3,078	\$ 8,262	\$ 9,773

In the table above, provision for credit losses, previously reported in Investing & Lending segment net revenues, is now reported as a separate line item. Previously reported amounts have been conformed to the current presentation.

Net revenues in our segments include allocations of interest income and expense to specific positions in relation to the cash generated by, or funding requirements of, such positions. See Note 25 to the 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.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Financial Advisory	\$ 716	\$ 916	\$2,379	\$2,306
Equity underwriting	385	432	1,138	1,331
Debt underwriting	586	632	1,843	2,181
Total Underwriting	971	1,064	2,981	3,512
Total net revenues	1,687	1,980	5,360	5,818
Operating expenses	962	1,114	3,013	3,334
Pre-tax earnings	\$ 725	\$ 866	\$2,347	\$2,484

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

<i>\$ in billions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Announced mergers and acquisitions	\$ 261	\$ 208	\$1,103	\$1,011
Completed mergers and acquisitions	\$ 427	\$ 265	\$1,034	\$ 699
Equity and equity-related offerings	\$ 17	\$ 15	\$ 49	\$ 56
Debt offerings	\$ 67	\$ 63	\$ 196	\$ 211

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 third quarter of 2019, industry-wide announced and completed mergers and acquisitions transactions decreased compared with the second quarter of 2019. In underwriting, industry-wide equity underwriting transactions decreased compared with the second quarter of 2019, reflecting a significant decline in initial public offerings. Industry-wide debt underwriting transactions also decreased, particularly in leveraged finance activity. In the future, if industry-wide mergers and acquisitions transactions continue to decline, or if industry-wide equity or debt underwriting transactions continue to decline, net revenues in Investment Banking would likely continue to be negatively impacted.

Three Months Ended September 2019 versus September 2018. Net revenues in Investment Banking were \$1.69 billion for the third quarter of 2019, 15% lower than the third quarter of 2018.

Net revenues in Financial Advisory were \$716 million, 22% lower compared with a strong third quarter of 2018, reflecting a decrease in completed mergers and acquisitions transactions.

Net revenues in Underwriting were \$971 million, 9% lower than the third quarter of 2018, due to lower net revenues in equity underwriting, reflecting a significant decline in industry-wide initial public offerings, and in debt underwriting, reflecting a decrease in industry-wide leveraged finance transactions.

Operating expenses were \$962 million for the third quarter of 2019, 14% lower than the third quarter of 2018, due to decreased compensation and benefits expenses, reflecting a decline in operating performance, and lower net provisions for litigation and regulatory proceedings. Pre-tax earnings were \$725 million in the third quarter of 2019, 16% lower than the third quarter of 2018.

As of September 2019, our investment banking transaction backlog increased compared with June 2019, due to higher estimated net revenues from potential advisory transactions and higher estimated net revenues from potential debt underwriting transactions, primarily from investment-grade and leveraged finance transactions. These increases were partially offset by slightly lower estimated 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.

Nine Months Ended September 2019 versus September 2018. Net revenues in Investment Banking were \$5.36 billion for the first nine months of 2019, 8% lower compared with a strong first nine months of 2018.

Net revenues in Financial Advisory were \$2.38 billion, 3% higher than the first nine months of 2018.

Net revenues in Underwriting were \$2.98 billion, 15% lower compared with a strong first nine months of 2018, due to lower net revenues in debt underwriting, primarily reflecting a significant decrease in industry-wide leveraged finance activity, and equity underwriting, reflecting a significant decline in industry-wide initial public offerings.

Operating expenses were \$3.01 billion for the first nine months of 2019, 10% lower than the first nine months of 2018, due to decreased compensation and benefits expenses, reflecting a decline in operating performance, and lower net provisions for litigation and regulatory proceedings. Pre-tax earnings were \$2.35 billion in the first nine months of 2019, 6% lower than the first nine months of 2018.

As of September 2019, our investment banking transaction backlog decreased compared with December 2018, primarily due to significantly lower estimated net revenues from potential equity underwriting transactions, reflecting declines across products, and lower estimated net revenues from potential debt underwriting transactions. In addition, estimated net revenues from potential advisory transactions were slightly lower.

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, securities sold under agreements to repurchase (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 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) widening of credit spreads on our inventory positions.

The table below presents the operating results of our Institutional Client Services segment.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
FICC Client Execution	\$1,410	\$1,307	\$ 4,718	\$ 5,060
Equities client execution	681	681	2,135	2,434
Commissions and fees	728	674	2,219	2,254
Securities services	468	439	1,296	1,308
Total Equities	1,877	1,794	5,650	5,996
Total net revenues	3,287	3,101	10,368	11,056
Operating expenses	2,336	2,357	7,572	8,061
Pre-tax earnings	\$ 951	\$ 744	\$ 2,796	\$ 2,995

In the table above, net revenues for the three months ended September 2018 included \$112 million (\$48 million in FICC Client Execution and \$64 million in Equities) of the total gain of \$160 million related to the retirement of our unsecured borrowings. The remaining portion of the gain was included in Investing & Lending.

The table below presents the net revenues of our Institutional Client Services segment by line item in the consolidated statements of earnings.

<i>\$ in millions</i>	FICC Client Execution	Total Equities	Institutional Client Services
	Three Months Ended September 2019		
Market making	\$1,299	\$1,085	\$ 2,384
Commissions and fees	–	728	728
Net interest income	111	64	175
Total net revenues	\$1,410	\$1,877	\$ 3,287
Three Months Ended September 2018			
Market making	\$1,281	\$1,000	\$ 2,281
Commissions and fees	–	674	674
Net interest income	26	120	146
Total net revenues	\$1,307	\$1,794	\$ 3,101
Nine Months Ended September 2019			
Market making	\$4,057	\$3,289	\$ 7,346
Commissions and fees	–	2,219	2,219
Net interest income	661	142	803
Total net revenues	\$4,718	\$5,650	\$10,368
Nine Months Ended September 2018			
Market making	\$4,545	\$3,486	\$ 8,031
Commissions and fees	–	2,254	2,254
Net interest income	515	256	771
Total net revenues	\$5,060	\$5,996	\$11,056

In the table above:

- The difference between commissions and fees and those in the consolidated statements of earnings represents commissions and fees included in our Investment Management segment.
- See “Net Revenues” for further information about market making revenues, commissions and fees, and net interest income. See Note 25 to the consolidated financial statements for net interest income by business segment.
- The primary driver of net revenues for FICC Client Execution was client activity.

Operating Environment. During the third quarter of 2019, Institutional Client Services operated in an environment generally characterized by macroeconomic concerns which weighed on market sentiment, driven by continued trade tensions and concerns over a slowdown in future global economic growth. In addition, monetary policies set by global central banks remained accommodative, including two rate cuts by the U.S. Federal Reserve. As a result of these factors, market conditions were mixed as volatility increased (the average daily VIX was 43% higher in August compared with July, while average daily VIX was 16 for the third quarter of 2019 compared with 15 for the second quarter of 2019), the yield curve for the U.S. Treasury 2-year note versus the 10-year note temporarily inverted for the first time since 2007 and global equity markets rebounded in September following declines in August (MSCI World Index decreased 1% compared with June 2019). These conditions contributed to solid client activity in FICC Client Execution, while client activity in Equities was lower compared with the second quarter of 2019. If activity levels decline, or volatility declines, or if macroeconomic concerns continue, net revenues in Institutional Client Services would likely be negatively impacted.

Three Months Ended September 2019 versus September 2018. Net revenues in Institutional Client Services were \$3.29 billion for the third quarter of 2019, 6% higher than the third quarter of 2018.

Net revenues in FICC Client Execution were \$1.41 billion, 8% higher than the third quarter of 2018, reflecting significantly higher client activity.

The following provides information about our FICC Client Execution net revenues by business, compared with results in the third quarter of 2018:

- Net revenues in commodities were higher, reflecting higher client activity and the impact of improved market-making conditions on our inventory.
- Net revenues in credit products and mortgages were higher, reflecting higher client activity.
- Net revenues in interest rate products were higher, reflecting higher client activity, largely offset by the impact of challenging market-making conditions on our inventory.
- Net revenues in currencies were lower, reflecting the impact of challenging market-making conditions on our inventory.

For the third quarter of 2019, approximately 90% of the net revenues in FICC Client Execution were generated from market intermediation and approximately 10% were generated from financing. FICC Client Execution financing net revenues include net revenues primarily from short-term repurchase agreement activities.

Net revenues in Equities were \$1.88 billion, 5% higher than the third quarter of 2018, primarily due to higher commissions and fees, reflecting increased client activity. Changes in cash equity market volumes were mixed compared with third quarter of 2018, including higher volumes in the U.S. and lower volumes in Europe. Net revenues in securities services were also higher, reflecting improved spreads. Net revenues in equities client execution were unchanged, reflecting significantly higher net revenues in cash products, offset by significantly lower net revenues in derivatives.

For the third quarter of 2019, approximately 55% of the net revenues in Equities were generated from market intermediation and approximately 45% were generated from financing. Equities financing net revenues include net revenues from prime brokerage and other financing activities, including securities lending, margin lending and swaps.

Operating expenses were \$2.34 billion for the third quarter of 2019, essentially unchanged compared with the third quarter of 2018, due to decreased compensation and benefits expenses, offset by higher brokerage, clearing, exchange and distribution fees. Pre-tax earnings were \$951 million in the third quarter of 2019, 28% higher than the third quarter of 2018.

Nine Months Ended September 2019 versus September 2018. Net revenues in Institutional Client Services were \$10.37 billion for the first nine months of 2019, 6% lower than the first nine months of 2018.

Net revenues in FICC Client Execution were \$4.72 billion, 7% lower than the first nine months of 2018, reflecting the impact of challenging market-making conditions on our inventory.

The following provides information about our FICC Client Execution net revenues by business, compared with results in the first nine months of 2018:

- Net revenues in currencies were significantly lower and net revenues in interest rate products were lower, primarily reflecting the impact of challenging market-making conditions on our inventory.
- Net revenues in credit products were lower, reflecting the impact of challenging market-making conditions on our inventory.
- Net revenues in commodities were significantly higher, primarily reflecting the impact of improved market-making conditions on our inventory.
- Net revenues in mortgages were higher, reflecting higher client activity.

For the first nine months of 2019, approximately 90% of the net revenues in FICC Client Execution were generated from market intermediation and approximately 10% were generated from financing.

Net revenues in Equities were \$5.65 billion, 6% lower than the first nine months of 2018, primarily due to lower net revenues in equities client execution, reflecting significantly lower net revenues in derivatives, partially offset by higher net revenues in cash products. Commissions and fees were slightly lower and net revenues in securities services were essentially unchanged.

For the first nine months of 2019, approximately 60% of the net revenues in Equities were generated from market intermediation and approximately 40% were generated from financing.

Operating expenses were \$7.57 billion for the first nine months of 2019, 6% lower than the first nine months of 2018, due to decreased compensation and benefits expenses, reflecting a decline in operating performance. Pre-tax earnings were \$2.80 billion in the first nine months of 2019, 7% lower than the first nine months of 2018.

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, 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 loans through our digital platform, Marcus, and secured loans through our digital platform, *Goldman Sachs Private Bank Select*.

The table below presents the operating results of our Investing & Lending segment.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Equity securities	\$ 662	\$1,111	\$3,050	\$3,461
Debt securities and loans	1,019	924	2,998	2,883
Total net revenues	1,681	2,035	6,048	6,344
Provision for credit losses	291	174	729	452
Operating expenses	969	777	3,045	2,760
Pre-tax earnings	\$ 421	\$1,084	\$2,274	\$3,132

Operating Environment. During the third quarter of 2019, our investments in private equities generally benefited from company-specific events, including sales. Global equity markets generally ended the quarter essentially unchanged after markets rebounded in September following declines in August. Results for our debt securities and loans reflected continued growth in loans receivable which led to slightly higher net interest income. If macroeconomic concerns negatively affect company-specific events, corporate performance or the origination of loans, or if global equity markets decline or credit spreads widen, net revenues in Investing & Lending would likely be negatively impacted.

Three Months Ended September 2019 versus September 2018. Net revenues in Investing & Lending were \$1.68 billion for the third quarter of 2019, 17% lower than the third quarter of 2018.

Net revenues in equity securities were \$662 million, 40% lower than the third quarter of 2018, reflecting significantly lower net gains from investments in private equities (the third quarter of 2019 included \$929 million of net gains), as well as net losses from investments in public equities (the third quarter of 2019 included \$267 million of net losses, primarily related to our investments in Uber Technologies, Inc., Avantor, Inc. and Tradeweb Markets Inc.). For the third quarter of 2019, 88% of the net revenues in equity securities were generated from real estate and 12% were generated from corporate investments.

Net revenues in debt securities and loans were \$1.02 billion, 10% higher than the third quarter of 2018, driven by significantly higher net interest income. The third quarter of 2019 included net interest income of \$891 million.

Provisions for credit losses was \$291 million for the third quarter of 2019, 67% higher than the third quarter of 2018, primarily reflecting higher impairments.

Operating expenses were \$969 million for the third quarter of 2019, 25% higher than the third quarter of 2018, due to higher expenses related to consolidated investments and our credit card activities, partially offset by decreased compensation and benefits expenses, reflecting a decline in operating performance. Pre-tax earnings were \$421 million in the third quarter of 2019, 61% lower than the third quarter of 2018.

Nine Months Ended September 2019 versus September 2018. Net revenues in Investing & Lending were \$6.05 billion for the first nine months of 2019, 5% lower than the first nine months of 2018.

Net revenues in equity securities were \$3.05 billion, 12% lower than the first nine months of 2018, reflecting lower net gains from investments in private equities (the first nine months of 2019 included \$2.83 billion of net gains), partially offset by significantly higher net gains from investments in public equities (the first nine months of 2019 included \$225 million of net gains). For the first nine months of 2019, 56% of the net revenues in equity securities were generated from corporate investments and 44% were generated from real estate.

Net revenues in debt securities and loans were \$3.00 billion, 4% higher than the first nine months of 2018, reflecting significantly higher net interest income, partially offset by significantly lower net gains from investments in debt instruments.

Provision for credit losses was \$729 million for the first nine months of 2019, 61% higher than the first nine months of 2018, primarily reflecting higher impairments and higher provisions related to consumer loans.

Operating expenses were \$3.05 billion for the first nine months of 2019, 10% higher than the first nine months of 2018, due to higher expenses related to consolidated investments and our credit card activities, partially offset by decreased compensation and benefits expenses, reflecting a decline in operating performance. Pre-tax earnings were \$2.27 billion in the first nine months of 2019, 27% lower than the first nine months of 2018.

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, distribution channel and the type of services provided, 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 32 basis points for both the three and nine months ended September 2019 and 35 basis points for both the three and nine months ended September 2018. These decreases reflected shifts in the mix of client assets and strategies. 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.

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Management and other fees	\$1,457	\$1,382	\$4,184	\$4,073
Incentive fees	45	148	147	677
Transaction revenues	166	174	484	568
Total net revenues	1,668	1,704	4,815	5,318
Operating expenses	1,349	1,320	3,970	4,156
Pre-tax earnings	\$ 319	\$ 384	\$ 845	\$1,162

The table below presents our period-end assets under supervision by asset class, distribution channel, region and vehicle.

<i>\$ in billions</i>	As of September	
	2019	2018
Asset Class		
Alternative investments	\$ 182	\$ 175
Equity	392	349
Fixed income	784	668
Total long-term AUS	1,358	1,192
Liquidity products	404	358
Total AUS	\$1,762	\$1,550
Distribution Channel		
Institutional	\$ 679	\$ 581
High-net-worth individuals	530	483
Third-party distributed	553	486
Total AUS	\$1,762	\$1,550
Region		
Americas	\$1,331	\$1,152
Europe, Middle East and Africa	263	246
Asia	168	152
Total AUS	\$1,762	\$1,550
Vehicle		
Separate accounts	\$1,044	\$ 878
Public funds	540	514
Private funds and other	178	158
Total AUS	\$1,762	\$1,550

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 changes in our assets under supervision.

\$ in billions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Beginning balance	\$1,660	\$1,513	\$1,542	\$1,494
Net inflows/(outflows):				
Alternative investments	8	3	10	5
Equity	41	7	44	14
Fixed income	20	3	52	15
Total long-term AUS net inflows/(outflows)	69	13	106	34
Liquidity products	17	8	7	13
Total AUS net inflows/(outflows)	86	21	113	47
Net market appreciation/(depreciation)	16	16	107	9
Ending balance	\$1,762	\$1,550	\$1,762	\$1,550

In the table above:

- Total AUS net inflows/(outflows) for the three and nine months ended September 2019 included \$58 billion of inflows (substantially all in equity and fixed income assets) in connection with the acquisitions of Standard & Poor's Investment Advisory Services (SPIAS) and United Capital.
- Total AUS net inflows/(outflows) for the nine months ended September 2019 also included \$13 billion of inflows (substantially all in equity and fixed income assets) in connection with the acquisition of Rocaton Investment Advisors (Rocaton).

The table below presents our average monthly assets under supervision by asset class.

\$ in billions	Average for the			
	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
Alternative investments	\$ 177	\$ 174	\$ 173	\$ 171
Equity	380	340	350	333
Fixed income	771	665	734	664
Total long-term AUS	1,328	1,179	1,257	1,168
Liquidity products	400	352	389	342
Total AUS	\$1,728	\$1,531	\$1,646	\$1,510

Operating Environment. During the third quarter of 2019, our assets under supervision increased from organic net inflows in liquidity products, alternative investments assets and fixed income assets, and appreciation in our client assets, reflecting generally higher fixed income prices. In addition, we increased assets under supervision through strategic acquisitions. The mix of our average assets under supervision between long-term assets under supervision and liquidity products was essentially unchanged compared with the second quarter of 2019. In the future, if asset prices 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 September 2019 versus September 2018. Net revenues in Investment Management were \$1.67 billion for the third quarter of 2019, 2% lower than the third quarter of 2018, due to significantly lower incentive fees. This decrease was partially offset by higher management and other fees (including the impact of the acquisition of United Capital), reflecting higher average assets under supervision, partially offset by a lower average effective fee due to shifts in the mix of client assets and strategies.

During the quarter, total assets under supervision increased \$102 billion (which included \$58 billion of inflows in connection with the SPIAS and United Capital acquisitions) to \$1.76 trillion. Long-term assets under supervision increased \$85 billion, including net inflows of \$69 billion, primarily in equity and fixed income assets, and net market appreciation of \$16 billion, primarily in fixed income assets. Liquidity products increased \$17 billion.

Operating expenses were \$1.35 billion for the third quarter of 2019, 2% higher than the third quarter of 2018, primarily due to expenses related to United Capital. Pre-tax earnings were \$319 million in the third quarter of 2019, 17% lower than the third quarter of 2018.

Nine Months Ended September 2019 versus September 2018. Net revenues in Investment Management were \$4.82 billion for the first nine months of 2019, 9% lower than the first nine months of 2018, primarily due to significantly lower incentive fees. In addition, transaction revenues were lower. These decreases were partially offset by slightly higher management and other fees (including the impact of the acquisition of United Capital), reflecting higher average assets under supervision, partially offset by a lower average effective fee due to shifts in the mix of client assets and strategies.

During the first nine months of 2019, total assets under supervision increased \$220 billion (which included \$71 billion of inflows in connection with the SPIAS, United Capital and Rocaton acquisitions) to \$1.76 trillion. Long-term assets under supervision increased \$213 billion, including net market appreciation of \$107 billion and net inflows of \$106 billion, both primarily in fixed income and equity assets. Liquidity products increased \$7 billion.

Operating expenses were \$3.97 billion for the first nine months of 2019, 4% lower than the first nine months of 2018, due to decreased compensation and benefits expenses, reflecting a decline in operating performance. Pre-tax earnings were \$845 million in the first nine months of 2019, 27% lower than the first nine months of 2018.

Geographic Data

See Note 25 to the 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 Treasury and our independent risk oversight and control functions to objectively evaluate balance sheet limit requests from our revenue-producing units 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.

Treasury and our independent risk oversight and control functions, along with our revenue-producing units, 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 Asset Liability Committee and the Risk Governance Committee. See “Risk Management — Overview and Structure of Risk Management” for an overview of our risk management structure.

Balance Sheet Limits. The Firmwide Asset Liability Committee and the Risk Governance Committee have the responsibility to review and approve 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 our revenue-producing units, Treasury and our independent risk oversight and control functions on a routine basis. Additionally, 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 by our revenue-producing units and Treasury, as well as our independent risk oversight and control functions.

Monitoring of Key Metrics. We monitor key balance sheet metrics 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 U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) Stress Tests (DFAST), as well as our resolution and recovery planning. See “Equity Capital Management and Regulatory Capital — Equity Capital Management” 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 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.

\$ in millions	As of	
	September 2019	December 2018
GCLA, segregated assets and other	\$ 297,940	\$313,138
Secured client financing	134,167	145,232
Inventory	288,592	204,584
Secured financing agreements	63,117	61,632
Receivables	45,767	42,006
Institutional Client Services	397,476	308,222
Public equity	2,293	1,445
Private equity	19,692	19,985
Total equity	21,985	21,430
Loans receivable	85,837	80,590
Loans, at fair value	14,267	13,416
Total loans	100,104	94,006
Debt securities	14,042	11,215
Other	6,025	7,913
Investing & Lending	142,156	134,564
Total inventory and related assets	539,632	442,786
Other assets	35,581	30,640
Total assets	\$1,007,320	\$931,796

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” for information about 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 securities purchased under agreements to resell (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.** 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.** We invest in and originate loans to provide financing to clients. These investments and loans are typically longer-term in nature. We make investments, through our Merchant Banking business, in debt securities, loans and public and private equity. We also originate secured and unsecured loans through our digital platforms. Other Investing & Lending primarily includes customer and other receivables.

Equity. The table below presents our equity investments by type and region.

\$ in millions	As of	
	September 2019	December 2018
Equity Type		
Corporate	\$17,761	\$17,262
Real Estate	4,224	4,168
Total	\$21,985	\$21,430
Region		
Americas	52%	53%
Europe, Middle East and Africa	16%	16%
Asia	32%	31%
Total	100%	100%

The table below presents our equity investments by vintage.

\$ in millions	As of September 2019
Equity	\$21,985
2012 or earlier	32%
2013 - 2015	31%
2016 - thereafter	37%
Total	100%

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Management's Discussion and Analysis

Loans. The table below presents our loans by type and region.

<i>\$ in millions</i>	Loans Receivable	Loans, at Fair Value	Total
As of September 2019			
Loan Type			
Corporate loans	\$41,463	\$ 3,183	\$ 44,646
PWM loans	18,331	7,623	25,954
Commercial real estate loans	12,662	1,803	14,465
Residential real estate loans	5,657	1,003	6,660
Consumer loans	5,525	–	5,525
Other loans	3,520	655	4,175
Allowance for loan losses	(1,321)	–	(1,321)
Total	\$85,837	\$14,267	\$100,104
Region			
Americas	64%	10%	74%
Europe, Middle East and Africa	18%	3%	21%
Asia	4%	1%	5%
Total	86%	14%	100%

As of December 2018

Loan Type			
Corporate loans	\$37,283	\$ 2,819	\$ 40,102
PWM loans	17,518	7,250	24,768
Commercial real estate loans	11,441	1,718	13,159
Residential real estate loans	7,284	973	8,257
Consumer loans	4,536	–	4,536
Other loans	3,594	656	4,250
Allowance for loan losses	(1,066)	–	(1,066)
Total	\$80,590	\$13,416	\$ 94,006
Region			
Americas	67%	11%	78%
Europe, Middle East and Africa	16%	2%	18%
Asia	3%	1%	4%
Total	86%	14%	100%

The table below presents the concentration of our secured and unsecured loans by an internally determined public rating agency equivalent.

	Investment- Grade	Non-Investment- Grade	Unrated	Total
As of September 2019				
Secured	26%	49%	9%	84%
Unsecured	5%	4%	7%	16%
Total	31%	53%	16%	100%
As of December 2018				
Secured	26%	49%	9%	84%
Unsecured	7%	3%	6%	16%
Total	33%	52%	15%	100%

In the table above, unrated loans primarily represents consumer loans, certain Private Wealth Management (PWM) loans and Purchased Credit Impaired loans for which other metrics are used to evaluate the credit quality.

The table below presents the concentration by industry of our corporate loans.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Corporate loans	\$44,646	\$40,102
Industry		
Consumer, Retail & Healthcare	14%	16%
Diversified Industrials	17%	17%
Financial Institutions	11%	10%
Funds	10%	10%
Natural Resources & Utilities	10%	11%
Real Estate	7%	6%
Technology, Media & Telecommunications	18%	18%
Other (including Special Purpose Vehicles)	13%	12%
Total	100%	100%

In the table above, as of both September 2019 and December 2018, corporate loans included approximately 40% of loans related to our relationship lending and investment banking activities, 15% of loans related to collateralized inventory financings and 45% of loans related to other corporate lending activity, including middle market lending.

See Note 9 to the 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, operating lease right-of-use assets, income tax-related receivables and miscellaneous receivables. Other assets included \$16.48 billion as of September 2019 and \$13.21 billion as of December 2018, held by consolidated investment entities (CIEs) in connection with our Investing & Lending segment activities. Substantially all of such assets relate to CIEs engaged in real estate investment activities. These entities were funded with liabilities of approximately \$9 billion as of September 2019 and \$6 billion as of December 2018. Substantially all such liabilities were nonrecourse, thereby reducing our equity at risk.

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Management's Discussion and Analysis

The table below presents the reconciliation of our balance sheet allocation to our U.S. GAAP balance sheet.

<i>\$ in millions</i>	GCLA, Segregated Assets and Other	Secured Client Financing	Institutional Client Services	Investing & Lending	Other Assets	Total
As of September 2019						
Cash and cash equivalents	\$ 94,094	\$ -	\$ -	\$ -	\$ -	\$ 94,094
Resale agreements	98,164	22,510	17,621	4	-	138,299
Securities borrowed	14,681	80,192	45,496	-	-	140,369
Loans receivable	-	-	-	85,837	-	85,837
Customer and other receivables	-	31,465	45,767	5,860	-	83,092
Financial instruments owned	85,942	-	288,592	50,455	-	424,989
Other assets	5,059	-	-	-	35,581	40,640
Total assets	\$297,940	\$134,167	\$397,476	\$142,156	\$35,581	\$1,007,320
As of December 2018						
Cash and cash equivalents	\$130,547	\$ -	\$ -	\$ -	\$ -	\$130,547
Resale agreements	87,022	32,389	19,808	39	-	139,258
Securities borrowed	10,382	83,079	41,824	-	-	135,285
Loans receivable	-	-	-	80,590	-	80,590
Customer and other receivables	-	29,764	42,006	7,545	-	79,315
Financial instruments owned	85,187	-	204,584	46,390	-	336,161
Other assets	-	-	-	-	30,640	30,640
Total assets	\$313,138	\$145,232	\$308,222	\$134,564	\$30,640	\$931,796

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 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.

Balance Sheet Analysis and Metrics

As of September 2019, total assets in our consolidated statements of financial condition were \$1.01 trillion, an increase of \$75.52 billion from December 2018, primarily reflecting increases in financial instruments owned of \$88.83 billion and other assets of \$10.00 billion, partially offset by decreases in cash and cash equivalents of \$36.45 billion. The increase in financial instruments owned primarily reflected higher client activity in equity securities and government obligations. The increase in other assets primarily reflected purchases of held-to-maturity securities and recognition of operating lease right-of-use assets upon adoption of ASU No. 2016-02. The decrease in cash and cash equivalents primarily reflected the impact of our activities, including a reduction in our GCLA.

As of September 2019, total liabilities in our consolidated statements of financial condition were \$915.31 billion, an increase of \$73.70 billion from December 2018, primarily reflecting increases in collateralized financings of \$27.83 billion, deposits of \$24.45 billion, customer and other payables of \$7.93 billion, and financial instruments sold, but not yet purchased of \$7.53 billion. The increase in collateralized financings reflected the impact of our and our clients' activity. The increase in deposits reflected an increase in consumer deposits. The increase in customer and other payables primarily reflected client activity. The increase in financial instruments sold, but not yet purchased reflected client activity in U.S. government obligations.

Our total repurchase agreements, accounted for as collateralized financings, were \$109.44 billion as of September 2019 and \$78.72 billion as of December 2018, which were 23% higher as of September 2019 and 1% higher as of December 2018 than the average daily amount of repurchase agreements over the respective quarters. As of September 2019, the increase in our repurchase agreements relative to the average daily amount of repurchase agreements during the quarter resulted from higher levels of our and our clients' 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 the leverage ratios.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Total assets	\$1,007,320	\$931,796
Unsecured long-term borrowings	\$ 216,878	\$224,149
Total shareholders' equity	\$ 92,012	\$ 90,185
Leverage ratio	10.9x	10.3x
Debt to equity ratio	2.4x	2.5x

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 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 common shareholders' equity to tangible common shareholders' equity.

<i>\$ in millions, except per share amounts</i>	As of	
	September 2019	December 2018
Total shareholders' equity	\$ 92,012	\$ 90,185
Preferred stock	(11,203)	(11,203)
Common shareholders' equity	80,809	78,982
Goodwill and identifiable intangible assets	(4,886)	(4,082)
Tangible common shareholders' equity	\$ 75,923	\$ 74,900
Book value per common share	\$ 218.82	\$ 207.36
Tangible book value per common share	\$ 205.59	\$ 196.64

In the table above:

- Tangible common shareholders' equity is calculated as 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 369.3 million as of September 2019 and 380.9 million as of December 2018. 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 deposits, collateralized financings, unsecured short-term and long-term borrowings, and shareholders' equity. We seek to maintain broad and diversified funding sources globally across products, programs, markets, currencies and creditors to avoid funding concentrations.

The table below presents information about our funding sources.

<i>\$ in millions</i>	As of			
	September 2019		December 2018	
Deposits	\$182,702	27%	\$158,257	25%
Collateralized financings	139,792	20%	111,964	18%
Unsecured short-term borrowings	51,958	8%	40,502	7%
Unsecured long-term borrowings	216,878	32%	224,149	36%
Total shareholders' equity	92,012	13%	90,185	14%
Total funding sources	\$683,342	100%	\$625,057	100%

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.

Deposits. Our deposits provide us with a diversified source of funding and reduce our reliance on wholesale funding. A growing portion of our deposit base consists of consumer deposits. Deposits are primarily used to finance lending activity, other inventory and a portion of our GCLA. We raise deposits, including savings, demand and time deposits, through internal and third-party broker-dealers, and from consumers and institutional clients, and primarily through Goldman Sachs Bank USA (GS Bank USA) and Goldman Sachs International Bank (GSIB). See Note 14 to the consolidated financial statements for further information about our deposits.

Secured Funding. We fund a significant amount of inventory on a secured basis. Secured funding includes collateralized financings in the consolidated statements of financial condition. We may also pledge our inventory as collateral for securities borrowed under a securities lending agreement. 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 consolidated statements of financial condition, excluding funding that can only be collateralized by liquid government and agency obligations, exceeded 120 days as of September 2019.

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 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. GS Bank USA has access to funding from the Federal Home Loan Bank. Our outstanding borrowings against the Federal Home Loan Bank were \$503 million as of September 2019 and \$528 million as of December 2018.

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 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 U.S. and non-U.S. 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. See Note 15 to the consolidated financial statements for further information about our unsecured short-term borrowings.

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. Unsecured long-term borrowings, including structured notes, are raised 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. 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 September 2019.

<i>\$ in millions</i>	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
2020	\$ –	\$ –	\$ –	\$ 7,784	\$ 7,784
2021	\$ 3,420	\$ 5,450	\$ 7,839	\$ 7,757	24,466
2022	\$ 6,380	\$ 6,355	\$ 6,275	\$ 5,933	24,943
2023	\$ 10,192	\$ 4,563	\$ 7,875	\$ 4,245	26,875
2024	\$ 6,455	\$ 4,335	\$ 5,865	\$ 2,228	18,883
2025 - thereafter					113,927
Total					\$216,878

The weighted average maturity of our unsecured long-term borrowings as of September 2019 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 consolidated financial statements for further information about our unsecured long-term borrowings.

Shareholders' Equity. Shareholders' equity is a stable and perpetual source of funding. See Note 19 to the consolidated financial statements for further information about our shareholders' equity.

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 (FRB) does not object to such capital action. See Notes 16 and 19 to the 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."

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 the range of macroeconomic scenarios and firm-specific assumptions.

In March 2019, the FRB revised its CCAR rules relating to the qualitative CCAR review. Accordingly, beginning with CCAR 2019, while the FRB evaluates our capital planning process, our capital plan is no longer subject to a potential qualitative objection.

With respect to our 2019 CCAR submission, the FRB informed us that it did not object to our capital plan, which includes the return of up to \$8.8 billion of capital from the third quarter of 2019 through the second quarter of 2020 (2019 CCAR cycle). The capital plan provides for up to \$7.0 billion in repurchases of outstanding common stock and \$1.8 billion in total common stock dividends, including an increase in our common stock dividend from \$0.85 to \$1.25 per share in the third quarter of 2019. During the third quarter of 2019, we returned a total of \$1.14 billion of capital, including stock repurchases of \$673 million and common stock dividends of \$466 million. Our stock repurchase amount was less than the quarterly amount of \$1.75 billion included in our capital plan submission and the unutilized amount will be carried forward to the remaining three quarters of the 2019 CCAR cycle. We may elect to execute a portion or all of our capital actions, based on, among other things, our current and projected capital position, and capital deployment opportunities. Based on the FRB's 2019 CCAR results and the proposed stress capital buffer (SCB) rule, we estimate that our CET1 ratio requirement will be between 12.5% to 13.0% (excluding management buffers). This estimate is based on our calculations and our current interpretation of the proposed SCB rule and may change when the rule is finalized and implemented. We published a summary of our annual DFAST results in June 2019. See "Available Information."

In October 2019, in accordance with the DFAST rules, we submitted our Mid-Cycle DFAST results to the FRB and published a summary of the results of our internally developed severely adverse scenario. The FRB eliminated the requirement to conduct the Mid-Cycle DFAST beginning in 2020. We are still required to conduct a stress test on an annual basis and publish a summary of the results. The FRB also conducts its own annual stress tests and publishes a summary of certain results. See "Available Information."

GS Bank USA was not required to conduct its annual stress test in 2019.

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 on 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 most binding capital constraints. Our most binding capital constraint is based on the results of the FRB's annual stress test scenarios which include the Standardized risk-based capital and leverage ratios.

We also attribute risk-weighted assets (RWAs) to our business segments. As of September 2019, approximately 55% of RWAs calculated in accordance with the Standardized Capital Rules and approximately 50% of RWAs calculated in accordance with the Advanced Capital Rules, 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 on 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.

On July 15, 2019, the Board of Directors of Group Inc. (Board) authorized the repurchase of an additional 50 million shares of common stock pursuant to our existing share repurchase program; however, we are only permitted to make repurchases to the extent that such repurchases have not been objected to by the FRB. As of September 2019, the remaining share authorization under our existing repurchase program was 68.0 million shares. 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 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-term and short-term issuer ratings by certain credit rating agencies. GS Bank USA and GSIB have also been assigned long-term 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 requirements calculated in accordance with the Capital Framework include the risk-based capital buffers and G-SIB surcharge. The risk-based capital buffers, applicable to us for 2019, include the capital conservation buffer of 2.5% and the countercyclical capital buffer, which the FRB has set to zero percent. In addition, the G-SIB surcharge applicable to us as of January 2019 is 2.5% based on 2017 financial data. Based on financial data for the nine months ended September 2019, our current estimate is that we are above the threshold for the 3.0% G-SIB surcharge. The earliest this surcharge could be reflected in our ratio requirements is January 2022. The G-SIB surcharge and countercyclical buffer in the future may differ due to additional guidance from our regulators and/or positional changes. See Note 20 to the consolidated financial statements for further information about our risk-based capital ratios and leverage ratios, and 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 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.

GS&Co. had regulatory net capital, as defined by Rule 15c3-1, of \$19.09 billion as of September 2019 and \$17.45 billion as of December 2018, which exceeded the amount required by \$16.38 billion as of September 2019 and \$15.00 billion as of December 2018. 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 September 2019 and December 2018, 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 (FCA). GSI is subject to the capital framework for E.U.-regulated financial institutions prescribed in the E.U. Fourth Capital Requirements Directive and the E.U. Capital Requirements Regulation (CRR). These capital regulations are largely based on Basel III.

The table below presents GSI's risk-based capital requirements.

	As of	
	September 2019	December 2018
Risk-based capital requirements		
CET1 capital ratio	8.8%	8.1%
Tier 1 capital ratio	10.8%	10.1%
Total capital ratio	13.4%	12.7%

In the table above, the risk-based capital requirements 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 information about GSI's risk-based capital ratios.

	As of	
	September 2019	December 2018
<i>\$ in millions</i>		
Risk-based capital and RWAs		
CET1 capital	\$ 23,765	\$ 23,956
Tier 1 capital	\$ 32,065	\$ 32,256
Tier 2 capital	\$ 5,377	\$ 5,377
Total capital	\$ 37,442	\$ 37,633
RWAs	\$206,751	\$200,089
Risk-based capital ratios		
CET1 capital ratio	11.5%	12.0%
Tier 1 capital ratio	15.5%	16.1%
Total capital ratio	18.1%	18.8%

In the table above, CET1 capital, Tier 1 capital and Total capital as of September 2019 excluded GSI's profits from December 1, 2018 through September 30, 2019, which GSI expects to distribute as dividends, subject to approval by the Board of Directors of GSI.

In November 2016, the European Commission proposed amendments to the CRR to implement a 3% 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. The required leverage ratio is expected to become effective for GSI on June 28, 2021. GSI had a leverage ratio of 4.4% as of both September 2019 and December 2018. GSI's leverage ratio as of September 2019 excluded GSI's profits from December 1, 2018 through September 30, 2019, which GSI expects to distribute as dividends, subject to approval by the Board of Directors of GSI. 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.

GSI is also subject to a minimum requirement for own funds and eligible liabilities issued to affiliates. This requirement is subject to a transitional period which began to phase in from January 1, 2019 and will become fully effective on January 1, 2022. As of September 2019, GSI was in compliance with this requirement.

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 requirements promulgated by authorities of the countries in which they operate. As of both September 2019 and December 2018, these subsidiaries were in compliance with their local capital requirements.

Regulatory Matters and Other Developments

Regulatory Matters

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 2018 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. The FRB and the FDIC did not identify deficiencies in our 2017 resolution plan. However, they did note one shortcoming that we responded to in our most recent resolution plan, which was submitted in June 2019. See "Available Information."

In addition, GS Bank USA is required to submit periodic resolution plans to the FDIC. GS Bank USA's most recent resolution plan was submitted in June 2018. In August 2018, the FDIC extended the next resolution plan filing deadline to no sooner than July 1, 2020.

Total Loss-Absorbing Capacity (TLAC). We are subject to the FRB's TLAC and related requirements, which became effective in January 2019, with no phase-in period. Failure to comply with the TLAC and related requirements could result in restrictions being imposed by the FRB and could limit our ability to repurchase shares, pay dividends and make certain discretionary compensation payments.

The table below presents TLAC and external long-term debt requirements.

	Requirements
TLAC to RWAs	22.0%
TLAC to leverage exposure	9.5%
External long-term debt to RWAs	8.5%
External long-term debt to leverage exposure	4.5%

In the table above:

- The TLAC to RWAs requirement includes (i) the 18% minimum, (ii) the 2.5% buffer, (iii) the 1.5% G-SIB surcharge (Method 1) and (iv) the countercyclical capital buffer, which the FRB has set to zero percent.
- The TLAC to leverage exposure requirement includes (i) the 7.5% minimum and (ii) the 2.0% leverage exposure buffer.
- The external long-term debt to RWAs requirement includes (i) the 6% minimum and (ii) the 2.5% G-SIB surcharge (Method 2).
- The external long-term debt to total leverage exposure is the 4.5% minimum.

The table below presents information about our TLAC and external long-term debt ratios.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
TLAC	\$ 244,239	\$ 254,836
External long-term debt	\$ 148,870	\$ 160,493
RWAs	\$ 565,601	\$ 558,111
Leverage exposure	\$1,385,056	\$1,342,906
TLAC to RWAs	43.2%	45.7%
TLAC to leverage exposure	17.6%	19.0%
External long-term debt to RWAs	26.3%	28.8%
External long-term debt to leverage exposure	10.7%	12.0%

In the table above:

- TLAC includes common and preferred stock, and eligible long-term debt issued by Group Inc. Eligible long-term debt represents unsecured debt, which has a remaining maturity of at least one year and satisfies additional requirements.
- External long-term debt consists of eligible long-term debt subject to a haircut if it is due to be paid between one and two years.
- RWAs represent Advanced RWAs. In accordance with the TLAC rules, the higher of Advanced or Standardized RWAs are used in the calculation of TLAC and external long-term debt ratios and applicable requirements.
- Leverage exposure consists of average adjusted total assets and certain off-balance-sheet exposures.

See “Business — Regulation” in Part I, Item 1 of the 2018 Form 10-K for further information about TLAC.

Other Developments

Brexit. In March 2017, the U.K. government commenced the formal proceedings to withdraw from the E.U. This triggered a period of two years during which the terms of the U.K.’s exit from the E.U. were required to be negotiated and the process to be concluded.

The E.U. and the U.K. have agreed to a withdrawal agreement (the Withdrawal Agreement) which requires ratification by both the U.K. and the E.U. Parliaments. The U.K. Parliament has not yet approved the Withdrawal Agreement. In October 2019, the U.K. government requested a further extension to the negotiating period. The E.U. has agreed to an extension until January 31, 2020 to allow the U.K. Parliament time to either ratify the Withdrawal Agreement or to hold other democratic processes, such as a general election. On October 29, 2019, the U.K. Parliament agreed to hold a general election on December 12, 2019. If the Withdrawal Agreement is ratified ahead of January 31, 2020, the terms of the extension will allow the U.K. to leave the E.U. at an earlier date. Notwithstanding this, without a successful conclusion to the process by January 31, 2020, there is a possibility that the U.K. will leave the E.U. without a clear framework for its relationship with the E.U. or any transitional arrangements in place, in which case firms based in the U.K. will lose their existing access arrangements to the E.U. markets. Such a scenario is referred to as a “hard” Brexit.

We are monitoring the ongoing developments related to Brexit and continue to prepare for anticipated outcomes, including a hard Brexit, with the goal of ensuring that we maintain access to E.U. markets and are able to continue to provide products and services to our E.U. clients. See “Regulatory Matters and Other Developments — Other Developments” in Part II, Item 7 of the 2018 Form 10-K for further information about our plan to manage a hard Brexit scenario.

Replacement of Interbank Offered Rates (IBORs), including LIBOR.

Central banks and regulators in a number of major jurisdictions (for example, U.S., U.K., E.U., Switzerland and Japan) have convened working groups to find, and implement the transition to, suitable replacements for IBORs. The U.K. FCA, which regulates LIBOR, has announced that it will not compel panel banks to contribute to LIBOR after 2021. The E.U. Benchmarks Regulation imposed conditions under which only compliant benchmarks may be used in new contracts after 2021. We have created a program that focuses on achieving an orderly transition from IBORs to alternative risk-free reference rates for us and our clients. As part of this transition, we continue to actively engage with our regulators and clients, as well as participate in central bank and sector working groups. In addition, during 2019, we issued debt and deposits linked to the Secured Overnight Funding Rate and Sterling Overnight Interbank Average Rate, as well as preferred stock with the rate reset based on 5-year U.S. Treasury rates. See “Regulatory Matters and Other Developments — Other Developments” in Part II, Item 7 of the 2018 Form 10-K for further information about our transition program.

Off-Balance-Sheet Arrangements and Contractual Obligations

Off-Balance-Sheet Arrangements

In the ordinary course of business, we enter into various types of off-balance-sheet arrangements. 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; 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.

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 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 consolidated financial statements.
Guarantees, letters of credit, and lending and other commitments	See Note 18 to the consolidated financial statements.
Derivatives	See "Risk Management — Credit Risk Management — Credit Exposures — OTC Derivatives" and Notes 4, 5, 7 and 18 to the 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, interest payments and operating lease payments.

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 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 consolidated financial statements for further information about our unrecognized tax benefits.

The table below presents our contractual obligations by type.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Time deposits	\$ 31,648	\$ 28,413
Secured long-term financings	\$ 11,845	\$ 11,878
Unsecured long-term borrowings	\$216,878	\$224,149
Interest payments	\$ 49,941	\$ 54,594
Operating lease payments	\$ 4,011	\$ 2,399

The table below presents our contractual obligations by expiration.

<i>\$ in millions</i>	As of September 2019			
	Remainder of 2019	2020 - 2021	2022 - 2023	2024 - Thereafter
Time deposits	\$ -	\$ 9,685	\$13,498	\$ 8,465
Secured long-term financings	\$ -	\$ 4,042	\$ 3,060	\$ 4,743
Unsecured long-term borrowings	\$ -	\$32,250	\$51,818	\$132,810
Interest payments	\$1,583	\$12,078	\$ 8,895	\$ 27,385
Operating lease payments	\$ 111	\$ 638	\$ 471	\$ 2,791

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 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 September 2019, unsecured long-term borrowings had maturities extending through 2069, consisted principally of senior borrowings, and included \$10.05 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 consolidated financial statements for further information about our unsecured long-term borrowings.
- As of September 2019, 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 September 2019, the difference between the aggregate contractual principal amount and the related fair value of unsecured long-term borrowings for which the fair value option was elected was not material.
- Interest payments represents estimated future contractual interest payments related to unsecured long-term borrowings, secured long-term financings and time deposits based on applicable interest rates as of September 2019, and includes stated coupons, if any, on structured notes.
- Operating lease payments include lease commitments for office space that 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 17 to the consolidated financial statements for further information about our operating lease liabilities.

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." 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" and "Risk Factors" in Part I, Item 1A of the 2018 Form 10-K.

Overview and Structure of Risk Management

Overview

We believe that effective risk management is critical to our success. Accordingly, we have established an enterprise risk management 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 enterprise risk management 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 risk oversight and control 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 and our Firmwide Reputational Risk Committee. The chief risk officer reports to our chief executive officer and to the Risk Committee of the Board. As part of the review of the firmwide risk portfolio, the chief risk officer 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.

The implementation of our risk governance structure and core risk management processes are overseen by Enterprise Risk, which reports to our chief risk officer, and is responsible for ensuring that our enterprise risk management framework provides the Board, our risk committees and senior management with a consistent and integrated approach to managing our various risks in a manner consistent with our risk appetite.

Our revenue-producing units, as well as Treasury, Operations, Services and Technology, are considered our first line of defense. They are accountable for the outcomes of our risk-generating activities, as well as for assessing and managing those risks within our risk appetite.

Our independent risk oversight and control functions are considered our second line of defense and provide independent assessment, oversight and challenge of the risks taken by our first line of defense, as well as lead and participate in risk committees. Independent risk oversight and control functions include Compliance, Conflicts Resolution, Controllers, Credit Risk, Enterprise Risk, Legal, Liquidity Risk, Market Risk, Model Risk, Operational Risk and Tax.

Internal Audit is considered our third line of defense and reports to the Audit Committee of the Board and administratively to our chief executive officer. Internal Audit includes professionals with a broad range of audit and industry experience, including risk management expertise. Internal Audit is responsible for independently assessing and validating the effectiveness of key controls, including those within the risk management framework, and providing timely reporting to the Audit Committee of the Board, senior management and regulators.

The three lines of defense structure promotes the accountability of first line risk takers, provides a framework for effective challenge by the second line and empowers independent review from the third line. In addition, there are other functions, including Human Capital Management, that contribute to our control environment.

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 committees that meet regularly and serve as an important means to facilitate and foster ongoing discussions to manage and mitigate risks.

We maintain strong and proactive communication about risk and we have a culture of collaboration in decision-making among our first and second lines of defense, committees and senior management. While our first line of defense is responsible for management of their risk, we dedicate extensive resources to our second line of defense 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 that are critical components of our risk management framework, including identifying, assessing, monitoring and managing 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.

An important part of our risk management process is firmwide stress testing. 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. Firmwide stress tests are performed on a regular basis and are designed to ensure a comprehensive analysis of our vulnerabilities and idiosyncratic risks combining financial and nonfinancial risks, including, but not limited to, credit, market, liquidity and funding, operational and compliance, strategic, systemic and emerging risks into a single combined scenario. We also perform ad hoc stress tests in anticipation of market events or conditions. Stress tests are also used to assess capital adequacy as part of our capital planning and stress testing process. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" for further information.

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 Enterprise Risk Committee is responsible for approving our risk limits framework, subject to the overall limits approved by the Risk Committee of the Board, and monitoring these limits on a daily basis.

The Risk Governance 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 that reflect our maximum risk appetite. This fosters an ongoing dialogue about risk among our first and second lines of defense, committees and senior management, as well as rapid escalation of risk-related matters. Additionally, through delegated authority from the Risk Governance Committee, Market Risk sets limits at certain product and desk levels, and Credit Risk sets limits for individual counterparties, counterparties and their subsidiaries, industries and countries. Limits are reviewed regularly and amended on a permanent or temporary basis to reflect changing market conditions, business conditions or risk tolerance.

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. The experience of our professionals, and their understanding of the nuances and limitations of each risk measure, guides us in assessing exposures and maintaining them within prudent levels.

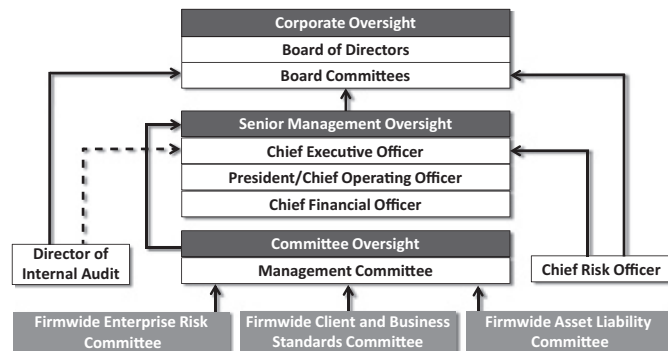
We reinforce a culture of effective risk management, consistent with our risk appetite, in our training and development programs, as well as in the way we evaluate performance, and recognize and reward our people. Our training and development programs, including certain sessions led by our most senior 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 first and second lines of defense. 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 committees that 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.

The chart below presents an overview of our risk management governance structure.



Management Committee. The Management Committee oversees our global activities. 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 Enterprise Risk Committee. The Firmwide Enterprise Risk Committee is responsible for overseeing all of our financial and nonfinancial risks. As a part of such oversight, the committee is responsible for the ongoing review, approval and monitoring of our enterprise risk management framework, as well as our risk limits framework. This committee is co-chaired by our chief financial officer and our chief risk officer, who are appointed as 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 Risk Committee.** The Firmwide Risk Committee is responsible for the ongoing monitoring of relevant financial risks and related risk limits at the firmwide, business and product levels. This committee is co-chaired by the chairs of 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 head of Securities Division Operations, who are appointed as chairs by the chairs of the Firmwide Enterprise Risk Committee.

Management's Discussion and Analysis

- **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 our 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 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 Compliance and our deputy chief risk officer, who are appointed as 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 co-chief information officer and the head of Global Investment Research, who are appointed as chairs by the chairs of the Firmwide Enterprise Risk Committee.
 - **Global Business and Operational Resilience Committee.** The Global Business and Operational Resilience Committee is responsible for oversight of the activities related to maintaining and developing business and operational resilience across all functions and regions. This committee is chaired by our chief administrative officer, who is appointed as chair by the chairs of the Firmwide Enterprise Risk Committee.
 - **Risk Governance Committee.** The Risk Governance Committee (through delegated authority from the Firmwide Enterprise Risk Committee) is responsible for the ongoing approval and monitoring of risk frameworks, policies, parameters and limits, at firmwide, business and product levels. In addition, this committee reviews the results of stress tests and scenario analyses. This committee is chaired by our chief risk officer, who is appointed as chair by the chairs of the Firmwide Enterprise Risk Committee.
 - **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 our chief market risk officer and the deputy head of Compliance, who are appointed as chairs by the chairs of the Firmwide Enterprise Risk Committee.
 - **Firmwide Client and Business Standards Committee.** The Firmwide Client and Business Standards Committee is responsible for overseeing relationships with our clients, client service and experience, and related business standards, as well as client-related reputational matters. This committee 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 provides updates to, and receives guidance from, the Public Responsibilities Committee of the Board.
- The following committees report jointly to the Firmwide Enterprise Risk Committee and 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 having potential heightened reputational risk pursuant to the criteria established by the Firmwide Reputational Risk Committee. This committee is chaired by our president and chief operating officer, and the vice-chairs are the head of Compliance and the head of Conflicts Resolution, who are appointed as vice-chairs by the chair of the Firmwide Reputational Risk Committee. This committee periodically provides updates to, and receives guidance from, the Public Responsibilities Committee of the Board.
 - **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-head of Europe, Middle East and Africa FICC sales, who are appointed as chairs by the chair of the Firmwide Client and Business Standards 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 chairman and a co-head of our Merchant Banking Division, who are appointed as chairs by our president and chief operating officer and our chief financial officer.
- **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 and a co-head of the Financing Group, who are appointed as chairs by the chairs of the Firmwide Enterprise 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, an advisory director, and a managing director in our Investment Banking Division, who are appointed as chairs by the chair of the Firmwide Client and Business Standards Committee.

Firmwide Asset Liability Committee. The Firmwide Asset Liability Committee reviews and approves the strategic direction for our financial resources, including capital, liquidity, funding and balance sheet. This committee has oversight responsibility for asset liability management, including interest rate and currency risk, funds transfer pricing, capital allocation and incentives, and credit ratings. This committee makes recommendations as to any adjustments to asset liability management and financial resource allocation in light of current events, risks, exposures, and regulatory requirements and approves related policies. This committee is co-chaired by our chief financial officer and our global treasurer, who are appointed as chairs by our chief executive officer, and reports to the Management 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 all of our employees.

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 Resolution, 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 Resolution 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 Resolution 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 ourselves or meet our liquidity needs in the event of firm-specific, broader industry or market liquidity stress events. We have in place a comprehensive and conservative set of liquidity and funding policies. Our principal objective is to be able to fund ourselves and to enable our core businesses to continue to serve clients and generate revenues, even under adverse circumstances.

Treasury, which reports to our chief financial officer, has primary responsibility for developing, managing and executing our liquidity and funding strategy within our risk appetite.

Liquidity Risk, which is independent of our revenue-producing units and Treasury, and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing our liquidity risk through firmwide oversight across our global businesses and the establishment of stress testing and limits frameworks.

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. A primary liquidity principle 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., Goldman Sachs Funding LLC (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 information;

- 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 information about our balance sheet management process and “— Funding Sources — Secured Funding” for further information about 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 Asset Liability Committee. In addition, our independent risk oversight and control functions analyze, and the Firmwide Asset Liability 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 September 2019, Group Inc. had \$31.31 billion of equity and subordinated indebtedness invested in GS&Co., its principal U.S. registered broker-dealer; \$41.46 billion invested in GSI, a regulated U.K. broker-dealer; \$2.92 billion invested in GSJCL, a regulated Japanese broker-dealer; \$33.15 billion invested in GS Bank USA, a regulated New York State-chartered bank; and \$4.02 billion invested in GSIB, a regulated U.K. bank. Group Inc. also provided, directly or indirectly, \$104.37 billion of unsubordinated loans (including secured loans of \$19.55 billion) and \$14.03 billion of collateral and cash deposits to these entities, substantially all of which was to GS&Co., GSI and GSJCL, as of September 2019. In addition, as of September 2019, 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 provides information about 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.

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. We also perform firmwide stress tests. See "Overview and Structure of Risk Management" for information about firmwide stress tests.

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 key modeling elements of our 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 except relating to GCLA or hedging activities.

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 in 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 large cash outflows that could occur in a stressed environment.

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 our 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 clearing agents and agent banks; 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

We regularly refine 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 approved by Treasury and Liquidity Risk. All existing models are reviewed on an annual basis, and significant changes to models and their assumptions are approved by Model Risk prior to implementation. See "Model Risk Management" for further information.

Limits

We use liquidity risk 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. See "Overview and Structure of Risk Management" for information about the limit approval process.

Limits are monitored by Treasury and Liquidity Risk. Liquidity Risk is responsible for identifying and escalating to senior management and/or the appropriate risk committee, 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, a qualitative assessment of our condition, as well as the financial markets, we believe our liquidity position as of both September 2019 and December 2018 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 information about our GCLA.

<i>\$ in millions</i>	Average for the Three Months Ended	
	September 2019	June 2019
Denomination		
U.S. dollar	\$146,907	\$139,266
Non-U.S. dollar	91,406	86,050
Total	\$238,313	\$225,316
Asset Class		
Overnight cash deposits	\$ 64,766	\$ 62,037
U.S. government obligations	94,941	90,378
U.S. agency obligations	18,312	11,800
Non-U.S. government obligations	60,294	61,101
Total	\$238,313	\$225,316
Entity Type		
Group Inc. and Funding IHC	\$ 41,280	\$ 40,222
Major broker-dealer subsidiaries	98,483	91,835
Major bank subsidiaries	98,550	93,259
Total	\$238,313	\$225,316

In the table 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.

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. 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 \$203.30 billion for the three months ended September 2019 and \$204.19 billion for the three months ended June 2019. We do not consider these assets liquid enough to be eligible for our GCLA.

Liquidity Regulatory Framework

As a bank holding company (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%. We expect that fluctuations in client activity, business mix and the market environment will impact our average LCR.

The table below presents information about our average daily LCR.

\$ in millions	Average for the Three Months Ended	
	September 2019	June 2019
Total HQLA	\$233,620	\$224,564
Eligible HQLA	\$175,937	\$167,382
Net cash outflows	\$131,227	\$125,870
LCR	134%	133%

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 and 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 when it is effective.

The following is information about 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 September 2019, GS Bank USA's LCR exceeded the minimum requirement. The 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 September 2019 exceeded the minimum requirement.
- **Other Subsidiaries.** We monitor 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 on Banking Supervision'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 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 2018 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.

	As of September 2019				
	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 and outlook are by DBRS, Inc. (DBRS), Fitch, Inc. (Fitch), Moody's Investors Service (Moody's), Rating and Investment Information, Inc. (R&I), and Standard and Poor's Ratings Services (S&P).
- 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 September 2019		
	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	Stable	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	Stable	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	Stable	Stable

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 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- or 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.

Nine Months Ended September 2019. Our cash and cash equivalents decreased by \$36.45 billion to \$94.09 billion at the end of the third quarter of 2019, primarily due to net cash used for operating activities and investing activities, partially offset by net cash provided by financing activities. The net cash used for operating activities primarily reflected an increase in financial instruments owned, partially offset by an increase in collateralized financings included in collateralized transactions. These changes primarily reflected higher client activity. The net cash used for investing activities reflected an increase in U.S. government and agency obligations accounted for as available-for-sale securities. The net cash provided by financing activities primarily reflected increases in consumer deposits, partially offset by net repayments of unsecured long-term borrowings.

Nine Months Ended September 2018. Our cash and cash equivalents increased by \$8.82 billion to \$118.87 billion at the end of the third quarter of 2018, primarily due to net cash provided by financing activities and operating activities, partially offset by net cash used for investing activities. The net cash provided by financing activities primarily reflected increases in brokered certificates of deposit and Marcus deposits, and net issuances of unsecured long-term borrowings. The net cash provided by operating activities primarily reflected a decrease in collateralized transactions and an increase in payables to customers and counterparties, partially offset by an increase in financial instruments owned. The net cash used for investing activities was primarily to fund loans receivable to corporate borrowers and loans backed by commercial real estate.

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, which is independent of our revenue-producing units and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing our market risk through firmwide oversight across our global businesses.

Managers in revenue-producing units and Market Risk discuss market information, positions and estimated 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

Our process for managing market risk includes:

- Collecting complete, accurate and timely information;
- Utilizing a dynamic limit-setting framework;
- Monitoring compliance with established market risk limits and reporting our exposures;
- Diversifying exposures;
- Controlling position sizes;
- Evaluating mitigants, such as economic hedges in related securities or derivatives; and
- Ensuring proactive communication between our revenue-producing units and our independent risk oversight and control functions.

Our market risk management systems enable us to perform an independent calculation of VaR and stress measures, capture risk measures at individual position levels, attribute risk measures to individual risk factors of each position, report many different views of the risk measures (e.g., by desk, business, product type or entity) and produce ad hoc analyses in a timely manner.

Risk Measures

We produce risk measures and monitor 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 risk oversight and control 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.

To comprehensively capture our exposures and relevant risks in our VaR calculation, we use historical simulations with full valuation of market factors at the position level by simultaneously shocking the relevant market factors for that position. These market factors include spot prices, credit spreads, funding spreads, yield curves, volatility and correlation, and are updated periodically based on changes in the composition of positions, as well as variations in market conditions. 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 firmwide stress tests, sensitivity analysis and scenario analysis. The results of our various stress tests are analyzed together for risk management purposes. See “Overview and Structure of Risk Management” for information about firmwide stress tests.

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.

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 testing scenarios will occur. Instead, stress testing is 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).

Limits

We use market risk limits at various levels to manage the size of our market exposures. These limits are set based on VaR and on a range of stress tests relevant to our exposures. See "Overview and Structure of Risk Management" for information about the limit approval process.

Market Risk is responsible for monitoring these limits, and identifying and escalating to senior management and/or the appropriate risk committee, on a timely basis, instances where limits have been exceeded (e.g., due to positional changes or changes in market conditions, such as increased volatilities or changes in correlations). Such instances are remediated by an inventory reduction and/or a temporary or permanent increase to the limit.

Model Review and Validation

Our VaR and stress testing models are regularly reviewed 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. All existing models are reviewed on an annual basis, and significant changes to models and their assumptions are approved by Model Risk prior to implementation. See "Model Risk Management" for further information.

Metrics

We analyze VaR at the firmwide level and a variety of more detailed levels, including by risk category, business and region. 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 our average daily VaR by risk category.

<i>\$ in millions</i>	Three Months Ended			Nine Months Ended September	
	September 2019	June 2019	September 2018	2019	2018
Interest rates	\$ 49	\$ 41	\$ 41	\$ 44	\$ 48
Equity prices	28	27	28	28	32
Currency rates	12	10	15	11	13
Commodity prices	12	12	10	12	11
Diversification effect	(43)	(38)	(41)	(40)	(40)
Total	\$ 58	\$ 52	\$ 53	\$ 55	\$ 64

Our average daily VaR increased to \$58 million for the third quarter of 2019 from \$52 million for the second quarter of 2019, primarily due to increases in the interest rates and currency rates categories, partially offset by an increase in the diversification effect. The overall increase was due to higher levels of volatility and increased exposures.

Our average daily VaR increased to \$58 million for the third quarter of 2019 from \$53 million for the third quarter of 2018, due to increases in the interest rates and commodity prices categories, partially offset by a decrease in the currency rates category and an increase in the diversification effect. The overall increase was primarily due to higher levels of volatility.

Our average daily VaR decreased to \$55 million for the nine months ended September 2019 from \$64 million for the nine months ended September 2018, primarily due to decreases in the interest rates, equity prices and currency rates categories. The overall decrease was primarily due to reduced exposures.

The table below presents our period-end VaR by risk category.

<i>\$ in millions</i>	As of		
	September 2019	June 2019	September 2018
Interest rates	\$ 51	\$ 43	\$ 39
Equity prices	29	29	33
Currency rates	12	8	21
Commodity prices	12	14	11
Diversification effect	(47)	(39)	(55)
Total	\$ 57	\$ 55	\$ 49

Our period-end VaR increased to \$57 million as of September 2019 from \$55 million as of June 2019, due to increases in the interest rates and currency rates categories, partially offset by an increase in the diversification effect and a decrease in the commodity prices category. The overall increase was primarily due to higher levels of volatility.

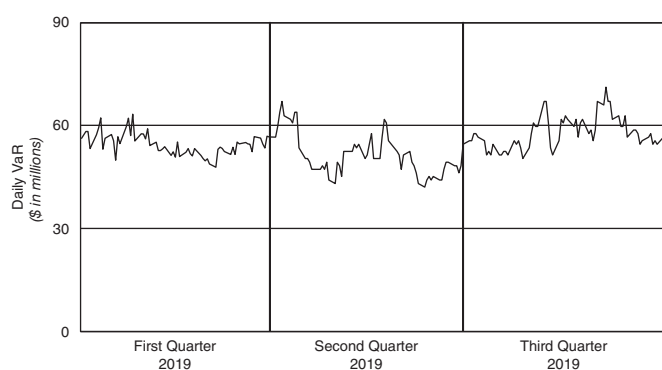
Our period-end VaR increased to \$57 million as of September 2019 from \$49 million as of September 2018, primarily due to an increase in the interest rates category and decrease in the diversification effect, partially offset by decreases in the currency rates and equity prices categories. The overall increase was primarily due to higher levels of volatility.

During the third quarter of 2019, the firmwide VaR risk limit was not exceeded, raised or reduced.

The table below presents our high and low VaR.

\$ in millions	Three Months Ended					
	September 2019		June 2019		September 2018	
	High	Low	High	Low	High	Low
Categories						
Interest rates	\$60	\$40	\$54	\$35	\$53	\$34
Equity prices	\$34	\$23	\$34	\$23	\$37	\$24
Currency rates	\$22	\$ 6	\$16	\$ 6	\$22	\$ 9
Commodity prices	\$15	\$11	\$14	\$10	\$14	\$ 8
Firmwide						
VaR	\$71	\$51	\$67	\$43	\$70	\$44

The chart below presents our daily VaR for the nine months ended September 2019.



The table below presents, by number of business days, the frequency distribution of our daily net revenues for positions included in VaR.

\$ in millions	Three Months Ended September		Nine Months Ended September	
	2019	2018	2019	2018
>\$100	5	1	10	11
\$75 - \$100	3	1	14	19
\$50 - \$75	15	10	35	47
\$25 - \$50	14	23	58	52
\$0 - \$25	13	20	47	47
\$(25) - \$0	12	8	22	12
\$(50) - \$(25)	2	-	2	-
Total	64	63	188	188

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 (i.e., a VaR exception) during the third quarter of 2019.

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 our market risk by asset category for positions accounted for at fair value, that are not included in VaR.

\$ in millions	As of		
	September 2019	June 2019	September 2018
Equity	\$1,938	\$1,985	\$1,911
Debt	2,221	2,136	1,660
Total	\$4,159	\$4,121	\$3,571

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.
- Funded equity and debt positions are included in our consolidated statements of financial condition in financial instruments owned. See Note 6 to the 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 (including hedges) was a gain of \$2 million as of both September 2019 and June 2019. 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 \$33 million as of September 2019 and \$38 million as of June 2019. 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 were \$85.84 billion as of September 2019 and \$83.77 billion as of June 2019, substantially all of which had floating interest rates. The estimated sensitivity to a 100 basis point increase in interest rates on such loans was \$671 million as of September 2019 and \$643 million as of June 2019 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 consolidated financial statements for further information about loans receivable.

Other Market Risk Considerations

As of both September 2019 and June 2019, 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 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 consolidated statements of financial condition. See Note 6 to the 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 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 consolidated statements of financial condition and 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 consolidated statements of earnings, and debt valuation adjustment in the consolidated statements of comprehensive income.

The table below presents certain categories of assets and liabilities in our consolidated statements of financial condition and the market risk measures used to assess those assets and liabilities.

Categories in the Consolidated Statements of Financial Condition	Market Risk Measures
Collateralized agreements, at fair value	VaR
Receivables	VaR Interest Rate Sensitivity
Financial instruments owned	VaR 10% Sensitivity Measures Credit Spread Sensitivity — Derivatives
Deposits, at fair value	VaR Credit Spread Sensitivity — Financial Liabilities
Collateralized financings, at fair value	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 customer and other receivables.

Credit Risk, which is independent of our revenue-producing units and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing our credit risk through firmwide oversight across our global businesses. The Risk Governance Committee reviews and approves 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, 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.

Credit Risk Management Process

Our process for managing credit risk includes:

- Collecting complete, accurate and timely information;
- Approving transactions and setting and communicating credit exposure limits;
- Monitoring compliance with established credit risk limits and reporting our exposure;
- Establishing or approving underwriting standards;
- Assessing the likelihood that a counterparty will default on its payment obligations;
- Measuring our current and potential credit exposure and losses resulting from a counterparty default;
- Using credit risk mitigants, including collateral and hedging;
- Maximizing recovery through active workout and restructuring of claims; and
- Ensuring proactive communication between our revenue-producing units and our independent risk oversight and control functions.

As part of the risk assessment process, we perform 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, 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, including, but not limited to, delinquency status, collateral values, Fair Isaac Corporation 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. These systems also provide management with comprehensive information about 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 risk limits at various levels, as well as underwriting standards to manage the size and nature of our credit exposures. Limits for industries and countries are based on our risk appetite and are designed to allow for regular monitoring, review, escalation and management of credit risk concentrations. See "Overview and Structure of Risk Management" for information about the limit approval process.

Policies authorized by the Firmwide Enterprise 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.

Credit Risk is responsible for monitoring these limits, and identifying and escalating to senior management and/or the appropriate risk committee, on a timely basis, instances where limits have been exceeded.

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 also perform firmwide stress tests. See "Overview and Structure of Risk Management" for information about firmwide stress tests.

Model Review and Validation

Our potential credit exposure and stress testing models, and any changes to such models or assumptions, are independently reviewed, validated and approved by Model Risk. See "Model Risk Management" for further information.

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 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 September 2019, our aggregate credit exposure decreased as compared with December 2018, primarily reflecting a decrease in cash deposits with central banks, partially offset by an increase in loans and lending commitments and securities financing transactions. The percentage of our credit exposures arising from non-investment-grade counterparties (based on our internally determined public rating agency equivalents) increased as compared with December 2018, primarily reflecting a decrease in investment-grade credit exposure related to cash deposits with central banks. Our credit exposure to counterparties that defaulted during the nine months ended September 2019 was higher as compared with our credit exposure to counterparties that defaulted during the same prior year period, and substantially all of such exposure was related to loans and lending commitments. Our credit exposure to counterparties that defaulted during the nine months ended September 2019 remained low, representing less than 0.5% of our total credit exposure. Estimated losses associated with these defaults have been recognized in earnings. 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 concentration by industry, region and credit quality.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Cash and Cash Equivalents	\$70,672	\$107,408
Industry		
Financial Institutions	20%	16%
Sovereign	80%	84%
Total	100%	100%
Region		
Americas	47%	36%
Europe, Middle East and Africa	22%	41%
Asia	31%	23%
Total	100%	100%
Credit Quality (Credit Rating Equivalent)		
AAA	53%	62%
AA	7%	10%
A	39%	27%
BBB	1%	1%
Total	100%	100%

The table above excludes cash segregated for regulatory and other purposes of \$23.42 billion as of September 2019 and \$23.14 billion as of December 2018.

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.

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 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 GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Management's Discussion and Analysis

The table below presents our net credit exposure from OTC derivatives and the concentration by industry and region.

\$ in millions	As of	
	September 2019	December 2018
OTC derivative assets	\$ 46,816	\$ 40,576
Collateral (not netted under U.S. GAAP)	(17,293)	(14,278)
Net credit exposure	\$ 29,523	\$ 26,298
Industry		
Consumer, Retail & Healthcare	3%	2%
Diversified Industrials	8%	8%
Financial Institutions	12%	14%
Funds	15%	17%
Municipalities & Nonprofit	8%	7%
Natural Resources & Utilities	14%	13%
Sovereign	25%	25%
Technology, Media & Telecommunications	8%	7%
Other (including Special Purpose Vehicles)	7%	7%
Total	100%	100%
Region		
Americas	42%	35%
Europe, Middle East and Africa	50%	55%
Asia	8%	10%
Total	100%	100%

In the table above:

- OTC derivative assets, included in the consolidated statements of financial condition, are reported on a net-by-counterparty basis (i.e., the net receivable for a given counterparty) when a legal right of setoff exists under an enforceable netting agreement (counterparty netting) and are accounted for at fair value, net of cash collateral received under enforceable credit support agreements (cash collateral netting).
- Collateral represents cash collateral and the fair value of securities collateral, primarily U.S. 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 table below presents the distribution of our net credit exposure from OTC derivatives by tenor.

\$ in millions	Investment-Grade		Non-Investment-Grade / Unrated	Total
	Investment-Grade	Non-Investment-Grade / Unrated		
As of September 2019				
Less than 1 year	\$ 19,511	\$ 4,717	\$ 24,228	
1 - 5 years	23,477	5,886	29,363	
Greater than 5 years	70,688	7,217	77,905	
Total	113,676	17,820	131,496	
Netting	(92,938)	(9,035)	(101,973)	
Net credit exposure	\$ 20,738	\$ 8,785	\$ 29,523	

As of December 2018

Less than 1 year	\$ 15,697	\$ 5,427	\$ 21,124
1 - 5 years	21,300	4,091	25,391
Greater than 5 years	51,737	4,191	55,928
Total	88,734	13,709	102,443
Netting	(68,736)	(7,409)	(76,145)
Net credit exposure	\$ 19,998	\$ 6,300	\$ 26,298

In the table above:

- Tenor is based on remaining contractual maturity.
- Netting includes counterparty netting across tenor categories and cash and securities collateral that management considers when determining credit risk (including collateral that is not eligible for netting under U.S. GAAP). Counterparty netting within the same tenor category is included within such tenor category.

The tables below present the distribution of our net credit exposure from OTC derivatives by tenor and internally determined public rating agency equivalents.

\$ in millions	Investment-Grade				
	AAA	AA	A	BBB	Total
As of September 2019					
Less than 1 year	\$ 385	\$ 3,278	\$ 8,405	\$ 7,443	\$ 19,511
1 - 5 years	653	2,939	12,599	7,286	23,477
Greater than 5 years	14,774	6,745	25,962	23,207	70,688
Total	15,812	12,962	46,966	37,936	113,676
Netting	(10,918)	(9,615)	(41,811)	(30,594)	(92,938)
Net credit exposure	\$ 4,894	\$ 3,347	\$ 5,155	\$ 7,342	\$ 20,738

As of December 2018

Less than 1 year	\$ 1,262	\$ 2,506	\$ 6,473	\$ 5,456	\$ 15,697
1 - 5 years	881	5,192	9,072	6,155	21,300
Greater than 5 years	9,202	3,028	21,415	18,092	51,737
Total	11,345	10,726	36,960	29,703	88,734
Netting	(6,444)	(7,107)	(32,390)	(22,795)	(68,736)
Net credit exposure	\$ 4,901	\$ 3,619	\$ 4,570	\$ 6,908	\$ 19,998

\$ in millions	Non-Investment-Grade / Unrated			
	BB or lower	Unrated	Total	
As of September 2019				
Less than 1 year		\$ 4,436	\$ 281	\$ 4,717
1 - 5 years		5,826	60	5,886
Greater than 5 years		7,083	134	7,217
Total		17,345	475	17,820
Netting		(8,929)	(106)	(9,035)
Net credit exposure		\$ 8,416	\$ 369	\$ 8,785

As of December 2018

Less than 1 year		\$ 5,255	\$ 172	\$ 5,427
1 - 5 years		4,053	38	4,091
Greater than 5 years		4,138	53	4,191
Total		13,446	263	13,709
Netting		(7,339)	(70)	(7,409)
Net credit exposure		\$ 6,107	\$ 193	\$ 6,300

THE GOLDMAN SACHS GROUP, INC. AND SUBSIDIARIES
Management's Discussion and Analysis

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 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 concentration by industry, region and credit quality.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Loans and Lending Commitments	\$210,879	\$200,823
Industry		
Consumer, Retail & Healthcare	19%	16%
Diversified Industrials	15%	16%
Financial Institutions	8%	9%
Funds	3%	4%
Natural Resources & Utilities	15%	15%
Real Estate	12%	10%
Technology, Media & Telecommunications	16%	18%
Other (including Special Purpose Vehicles)	12%	12%
Total	100%	100%
Region		
Americas	75%	76%
Europe, Middle East and Africa	21%	20%
Asia	4%	4%
Total	100%	100%
Credit Quality (Credit Rating Equivalent)		
AAA	1%	1%
AA	5%	5%
A	13%	14%
BBB	29%	29%
BB or lower	52%	51%
Total	100%	100%

- **PWM, Residential Real Estate and Other Lending.** We extend PWM loans and lending commitments through our private bank, substantially all of which are secured by commercial and 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.

We also have residential real estate and other lending exposures, which include purchased residential real estate and unsecured consumer loans and commitments to purchase such loans (including distressed loans) and securities.

The table below presents our credit exposure from PWM, residential real estate and other lending, and the concentration by region.

<i>\$ in millions</i>	PWM	Residential Real Estate and Other
As of September 2019		
Credit Exposure	\$28,327	\$11,044
Americas	89%	71%
Europe, Middle East and Africa	9%	29%
Asia	2%	—
Total	100%	100%
As of December 2018		
Credit Exposure	\$26,775	\$11,976
Americas	91%	72%
Europe, Middle East and Africa	7%	27%
Asia	2%	1%
Total	100%	100%

- **Consumer Lending.** We originate unsecured consumer loans.

The table below presents our credit exposure from originated unsecured consumer loans and the concentration by the five most concentrated U.S. states.

<i>\$ in millions</i>	Consumer
As of September 2019	
Credit Exposure	\$5,525
California	13%
Texas	9%
New York	7%
Florida	7%
Illinois	4%
Other	60%
Total	100%
As of December 2018	
Credit Exposure	\$4,536
California	12%
Texas	9%
New York	7%
Florida	7%
Illinois	4%
Other	61%
Total	100%

See Note 9 to the consolidated financial statements for further information about the credit quality indicators of consumer loans.

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. and non-U.S. government and agency obligations.

The table below presents our credit exposure from securities financing transactions and the concentration by industry, region and credit quality.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Securities Financing Transactions	\$28,386	\$20,979
Industry		
Financial Institutions	38%	31%
Funds	32%	33%
Municipalities & Nonprofit	4%	7%
Sovereign	24%	28%
Other (including Special Purpose Vehicles)	2%	1%
Total	100%	100%
Region		
Americas	41%	33%
Europe, Middle East and Africa	38%	41%
Asia	21%	26%
Total	100%	100%
Credit Quality (Credit Rating Equivalent)		
AAA	15%	11%
AA	34%	34%
A	34%	35%
BBB	6%	10%
BB or lower	8%	10%
Unrated	3%	–
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 concentration by industry, region and credit quality.

<i>\$ in millions</i>	As of	
	September 2019	December 2018
Other Credit Exposures	\$44,653	\$41,649
Industry		
Financial Institutions	84%	84%
Funds	10%	7%
Natural Resources & Utilities	2%	4%
Other (including Special Purpose Vehicles)	4%	5%
Total	100%	100%
Region		
Americas	45%	44%
Europe, Middle East and Africa	43%	46%
Asia	12%	10%
Total	100%	100%
Credit Quality (Credit Rating Equivalent)		
AAA	3%	3%
AA	55%	47%
A	22%	26%
BBB	8%	8%
BB or lower	12%	16%
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.

High inflation in Turkey combined with current account deficits and significant depreciation of the Turkish Lira has led to concerns about its economic stability. As of September 2019, our total credit exposure to Turkey was \$1.98 billion, which was with non-sovereign counterparties or borrowers. Such exposure consisted of \$1.55 billion related to OTC derivatives, \$231 million related to loans and lending commitments and \$201 million related to secured receivables. After taking into consideration the benefit of Turkish corporate and sovereign collateral and other risk mitigants provided by Turkish counterparties, our net credit exposure was \$300 million. In addition, our total market exposure to Turkey as of September 2019 was \$664 million, which was primarily with sovereign issuers or underliers. Such exposure consisted of \$972 million related to debt, \$(319) million related to credit derivatives and \$11 million related to equities.

Significant depreciation of the Argentine Peso has resulted in higher inflation and has raised concerns about Argentina's economic stability. As of September 2019, our total credit exposure to Argentina was \$194 million, which was with non-sovereign counterparties or borrowers, and was primarily related to loans and lending commitments. In addition, our total market exposure to Argentina was \$179 million, primarily reflecting debt exposure with sovereign issuers or underliers.

The potential restructuring of Lebanon's sovereign debt has led to concerns about its financial stability. As of September 2019, our credit exposure to Lebanon was \$674 million, substantially all of which related to loans and lending commitments with non-sovereign borrowers. After taking into consideration the benefit of cash and Lebanese sovereign collateral received, our net credit exposure was not material. In addition, our total market exposure to Lebanon as of September 2019 was not material.

Venezuela has delayed payments on its sovereign debt and its political situation remains unclear. As of September 2019, our total credit and market exposure for Venezuela 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.

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 responsible for the ongoing approval and monitoring of the frameworks, policies, parameters, limits and thresholds which govern our operational risks.

Operational Risk, which is independent of our revenue-producing units and reports to our chief risk officer, has primary responsibility for developing and implementing a formalized framework for assessing, monitoring and managing operational risk with the goal of maintaining our exposure to operational risk at levels that are within our risk appetite.

Operational Risk Management Process

Our process for managing operational risk includes:

- Collecting complete, accurate and timely information;
- Training, supervision and development of our people;
- Active participation of senior management in identifying and mitigating our key operational risks;
- Independent risk oversight and control functions that monitor operational risk, and implementation of policies, procedures and controls designed to prevent the occurrence of operational risk events; and
- Ensuring proactive communication between our revenue-producing units and our independent risk oversight and control functions.

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, our first and second lines of defense 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 all employees 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.

We use operational risk management applications to capture and organize operational risk event data and key metrics. One of our key risk identification and assessment tools is an operational risk and control self-assessment process, which is performed by our managers. 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 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 are used in the determination of the appropriate level of operational risk capital to hold. We also perform firmwide stress tests. See "Overview and Structure of Risk Management" for information about firmwide stress tests.

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 operational risk limits and thresholds consistent with our risk appetite statement, as well as escalation protocols. Operational Risk is responsible for monitoring these limits and thresholds, and identifying and escalating to senior management and/or the appropriate risk committee, on a timely basis, instances where limits and thresholds have been exceeded. See "Overview and Structure of Risk Management" for information about the limit and threshold approval process.

Model Review and Validation

The statistical models used to measure operational risk exposure are independently reviewed, validated and approved by Model Risk. See "Model Risk Management" for further information.

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, which is independent of our revenue-producing units, model developers, model owners and model users, and reports to our chief risk officer, has primary responsibility for assessing, monitoring and managing our model risk through firmwide oversight across our global businesses, and provides periodic updates to senior management, risk committees and the Risk Committee of the Board.

Model Review and Validation Process

Model Risk 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. All existing models are reviewed on an annual basis, and new models or significant changes to models are approved 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.goldmansachs.com and the investor relations section of our website is located at www.goldmansachs.com/investor-relations, where we make available free of charge, our 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 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 (Investor Relations), are our certificate of incorporation and by-laws, charters for our Audit, Risk, Compensation, Corporate Governance and Nominating, and Public Responsibilities Committees, 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.

Our website also includes information about (i) purchases and sales of our equity securities by our executive officers and directors; (ii) 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; (iii) DFAST results; (iv) the public portion of our resolution plan submission; (v) our Pillar 3 disclosure; and (vi) our average daily LCR.

Investor Relations 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. We use our website, our Twitter account (twitter.com/GoldmanSachs), our Instagram account ([instagram.com/GoldmanSachs](https://www.instagram.com/GoldmanSachs)) and other social media channels as additional means of disclosing public information to investors, the media and others. Our officers may use similar social media channels to disclose public information. It is possible that certain information we or our officers post on our website and on social media could be deemed material, and we encourage investors, the media and others interested in Goldman Sachs to review the business and financial information we or our officers post on our website and on the social media channels identified above. The information on our website and those 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 in this Form 10-Q, and 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 or statements of current conditions, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control.

These statements may relate to, among other things, (i) our future plans and objectives and results, (ii) various legal proceedings, governmental investigations or mortgage-related contingencies as set forth in Notes 27 and 18 to the consolidated financial statements, (iii) the results of stress testing, (iv) the objectives and effectiveness of our business continuity plan, information security program, risk management and liquidity policies, (v) our resolution plan and resolution strategy and their implications for our debtholders and other stakeholders, (vi) the design and effectiveness of our resolution capital and liquidity models and triggers and alerts framework, (vii) trends in or growth opportunities for our businesses, including the timing and benefits of business and strategic initiatives and changes in and the importance of the efficiency ratio, (viii) the effect of changes to the regulations applicable to us, as well as our future status, activities or reporting under U.S. or non-U.S. banking and financial regulation, (ix) our NSFR and SCB, (x) our level of future compensation expense as a percentage of operating expenses, (xi) our investment banking transaction backlog, (xii) our expected tax rate, (xiii) the estimated impact of new accounting standards, including the Current Expected Credit Losses (CECL) model, (xiv) the level of our capital actions, (xv) our expected interest income, (xvi) our credit exposures, (xvii) our preparations for Brexit, including our plan to manage a hard Brexit scenario, (xviii) the replacement of LIBOR and other IBORs and the objectives of our program for the transition from IBORs to alternative risk-free reference rates, (xix) the adequacy of our allowance for credit losses, (xx) the projected growth of our U.S. and U.K. retail deposit platforms, (xxi) our engagement in transaction banking, (xxii) our planned 2019 benchmark issuances, (xxiii) the amount of GCLA we expect to hold and (xxiv) expenses we may incur, including those associated with investing in our consumer lending, credit card and transaction banking businesses.

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. It is also possible that our actual capital actions may differ, possibly materially, from those permitted by our CCAR 2019 capital plan. Important factors that could cause our actual results and financial condition and capital actions to differ from those indicated in these statements include, among others, those described below and in "Risk Factors" in Part I, Item 1A of the 2018 Form 10-K.

Statements about our investment banking transaction backlog are subject to the risk that such transactions may be modified or may not be completed at all and related net revenues may not be realized or may be materially less than expected. Important factors that could have such a result include, for underwriting transactions, a decline or weakness in general economic conditions, outbreak of hostilities, volatility in the securities markets or an adverse development with respect to the issuer of the securities and, for 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.

Statements about our expected 2019 effective income tax rate are subject to the risk that it may differ from the anticipated rate indicated in such statements, possibly materially, due to, among other things, changes in our earnings mix, our profitability and entities in which we generate profits, the assumptions we have made in forecasting our expected tax rate, as well as guidance that may be issued by the IRS.

Statements about our NSFR and SCB are based on our current interpretation and expectations of the relevant proposals, and reflect significant assumptions about how our NSFR and SCB are calculated. Our actual NSFR and SCB will depend on the final rules and, for the SCB, the results of the applicable supervisory stress tests, and the methods used to calculate our NSFR and SCB may differ, possibly materially, from those used to calculate our NSFR and SCB for future disclosures.

Statements about the level of compensation expense, including as a percentage of operating expenses, as our platform business initiatives reach scale are subject to the risks that the compensation costs to operate our businesses, including platform initiatives, may be greater than currently expected.

Statements about the estimated impact of CECL are subject to the risk that the actual impact may differ, possibly materially, from that currently expected due to, among other things, additional guidance from accounting or regulatory agencies, management judgments, changes in the economic environment or the size and type of loan portfolios we hold when we adopt CECL, or changes to our credit loss models in connection with validating data inputs and developing the policies, systems and controls required to implement CECL.

Statements about the projected growth of our U.S. and U.K. retail deposit platforms are subject to the risk that actual growth may differ, possibly materially, from that currently anticipated due to, among other things, changes in interest rates and competition from other similar products.

Statements about the timing, costs and benefits of business and strategic initiatives, and the effects of those initiatives on changes in and the importance of our efficiency ratio, are subject to the risk that the actual timing, costs, benefits and effects may differ, possibly materially, from what is currently anticipated due to, among other things, changes in our ability to execute these initiatives. For example, statements about transaction banking are based on our current expectations regarding our ability to implement and effectively conduct this activity. As a result, the timing of our ability to engage in, and benefits from, transaction banking may change, possibly materially, from what is expected, and we may be unable to generate the revenues or achieve the anticipated expense savings (and operational risk exposure reductions). Transaction banking and credit cards are new businesses and are subject to the risks associated with new business activities, including the ability to develop new and competitive systems and processes, and hire and retain the necessary personnel.

Statements about planned 2019 benchmark issuances and the amount of GCLA we expect to hold are subject to the risk that actual issuances and GCLA levels may differ, possibly materially, from that currently expected due to changes in market conditions, business opportunities or our funding and projected liquidity needs.

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 on 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 September 2019 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 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 September 2019.

	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
July	3,085,584	\$217.69	3,085,584	68,023,966
August	5,345	\$200.15	5,345	68,018,621
September	48	\$207.21	–	68,018,621
Total	3,090,977		3,090,929	

In the table above, total shares purchased during September 2019 consisted of 48 shares remitted to satisfy statutory withholding taxes on the delivery of equity-based awards.

On July 15, 2019, the Board authorized the repurchase of an additional 50 million shares of common stock pursuant to the firm’s existing share repurchase program. Since March 2000, our Board has approved a repurchase program authorizing repurchases of up to 605 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 5. Other Information

On October 29, 2019, Group Inc. filed a Certificate of Elimination with the Secretary of State of the State of Delaware which, upon filing, had the effect of eliminating from its Restated Certificate of Incorporation all matters set forth therein with respect to shares of our 6.20% Non-Cumulative Preferred Stock, Series B, which had previously been redeemed in full. A copy of the Certificate of Elimination is attached as Exhibit 3.1 to this Form 10-Q and incorporated by reference herein. A Restated Certificate of Incorporation reflecting these changes was filed with the Secretary of State of the State of Delaware on October 29, 2019, and a copy is attached as Exhibit 3.2 to this Form 10-Q.

Item 6. Exhibits

Exhibits

- 3.1 Certificate of Elimination of 6.20% Non-Cumulative Preferred Stock, Series B, of The Goldman Sachs Group, Inc.
- 3.2 Restated Certificate of Incorporation of The Goldman Sachs Group, Inc., amended as of October 29, 2019.
- 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 Pursuant to Rules 405 and 406 of Regulation S-T, the following information is formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) the Consolidated Statements of Earnings for the three and nine months ended September 30, 2019 and September 30, 2018, (ii) the Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2019 and September 30, 2018, (iii) the Consolidated Statements of Financial Condition as of September 30, 2019 and December 31, 2018, (iv) the Consolidated Statements of Changes in Shareholders' Equity for the three and nine months ended September 30, 2019 and September 30, 2018, (v) the Consolidated Statements of Cash Flows for the nine months ended September 30, 2019 and September 30, 2018, (vi) the notes to the Consolidated Financial Statements and (vii) the cover page.
- 104 Cover Page Interactive Data File (formatted in iXBRL Exhibit 101).

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/ Stephen M. Scherr
Name: Stephen M. Scherr
Title: Chief Financial Officer
Date: October 31, 2019

By: /s/ Brian J. Lee
Name: Brian J. Lee
Title: Principal Accounting Officer
Date: October 31, 2019

CERTIFICATE OF ELIMINATION
OF
6.20% NON-CUMULATIVE PREFERRED STOCK, SERIES B
OF
THE GOLDMAN SACHS GROUP, INC.

(Pursuant to Section 151(g)
of the General Corporation Law
of the State of Delaware)

The Goldman Sachs Group, Inc., a Delaware corporation (the "Corporation"), hereby certifies in accordance with the provisions of Section 151(g) of the General Corporation Law of the State of Delaware that the following resolutions were duly adopted upon the completion of the redemption of all outstanding shares of its 6.20% Non-Cumulative Preferred Stock, Series B (the "Series B Preferred Stock") by the Securities Issuance Committee (the "Committee") of the board of directors of the Corporation (the "Board of Directors"), by unanimous written consent dated June 13, 2019, in accordance with the resolutions of the Board of Directors dated September 16, 2005 and October 28, 2011, with respect to its Series B Preferred Stock and the certificate of designations relating to the Series B Preferred Stock as filed with the Secretary of State of the State of Delaware on October 28, 2005 (the "Certificate of Designations"):

RESOLVED, that pursuant to Section 151 of the General Corporation Law of the State of Delaware and the authority granted to and vested in the Committee in accordance with the provisions of the Restated Certificate of Incorporation of the Corporation, as amended (the "Restated Certificate of Incorporation") and in accordance with the resolutions of the board of directors of the Corporation, dated September 16, 2005, the Securities Issuance Committee, by resolutions duly adopted, authorized the issuance of the 6.20% Non-Cumulative Preferred Stock, Series B (the "Series B Preferred Stock") and established the voting powers, designations, preferences and relative, participating, optional and other rights, and the qualifications, limitations or restrictions thereof, and authorized the filing of the Certificate of Designations with the Secretary of State of the State of Delaware.

RESOLVED, that no shares of the Series B Preferred Stock are outstanding and no shares of the Series B Preferred Stock will be issued subject to the Certificate of Designations.

RESOLVED, that when a certificate setting forth this resolution (a "Certificate of Elimination") becomes effective, it shall have the effect of eliminating from the Restated Certificate of Incorporation all matters set forth in the Certificate of Designations with respect to the Series B Preferred Stock.

RESOLVED, that anyone with the title of Chief Executive Officer, President, Chief Operating Officer, Executive Vice President, General Counsel, Chief Financial Officer, Treasurer, Controller or Assistant Secretary of the Corporation is hereby authorized, in the name and on behalf of the Corporation, to prepare, execute and file with the Secretary of State of the State of Delaware a Certificate of Elimination relating to the Series B Preferred Stock.

[Signature page follows]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Elimination to be signed by Karen P. Seymour, its Executive Vice President and General Counsel, this 29th day of October, 2019.

THE GOLDMAN SACHS GROUP, INC.

By: /s/ Karen P. Seymour

Name: Karen P. Seymour

Title: Executive Vice President and General Counsel

**RESTATED
CERTIFICATE OF INCORPORATION
OF
THE GOLDMAN SACHS GROUP, INC.**

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the Delaware General Corporation Law (the “Corporation”), DOES HEREBY CERTIFY:

1. The name of the Corporation is The Goldman Sachs Group, Inc. The date of filing of its original certificate of incorporation with the Secretary of State of the State of Delaware was July 21, 1998.
2. This Restated Certificate of Incorporation restates and integrates and does not further amend the provisions of the certificate of incorporation of the Corporation as heretofore amended or supplemented. There is no discrepancy between the provisions of this Restated Certificate of Incorporation and the provisions of the certificate of incorporation of the Corporation as heretofore amended or supplemented. This Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Section 245 of the General Corporation Law of the State of Delaware. The text of the certificate of incorporation is hereby restated to read herein as set forth in full:

FIRST. The name of the Corporation is The Goldman Sachs Group, Inc.

SECOND. The address of the Corporation’s registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD. The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law. Without limiting the generality of the foregoing, the Corporation shall have all of the powers conferred on corporations by the Delaware General Corporation Law and other law, including the power and authority to make an initial charitable contribution (as defined in Section 170(c) of the Internal Revenue Code of 1986, as currently in effect or as the same may hereafter be amended) of up to an aggregate of \$200,000,000 to one or more entities (the “Contribution”), and to make other charitable contributions from time to time thereafter, in such amounts, on such terms and conditions and for such purposes as may be lawful.

FOURTH. The total number of shares of all classes of stock which the Corporation shall have authority to issue is 4,350,000,000, of which 4,000,000,000 shares of the par value of \$0.01 per share shall be a separate class designated as Common Stock, 200,000,000 shares of the par value of \$0.01 per share shall be a separate class designated as Nonvoting Common Stock and 150,000,000 shares of the par value of \$0.01 per share shall be a separate class designated as Preferred Stock.

COMMON STOCK AND NONVOTING COMMON STOCK

Except as set forth in this Article FOURTH, the Common Stock and the Nonvoting Common Stock (together, the “Common Shares”) shall have the same rights and privileges and shall rank equally, share ratably and be identical in all respects as to all matters.

(i) Voting. Except as may be provided in this Restated Certificate of Incorporation or required by law, the Common Stock shall have voting rights in the election of directors and on all other matters presented to stockholders, with each holder of Common Stock being entitled to one vote for each share of Common Stock held of record by such holder on such matters. The Nonvoting Common Stock shall have no voting rights other than such rights as may be required by the first sentence of Section 242(b)(2) of the Delaware General Corporation Law or any similar provision hereafter enacted; provided that an amendment of this Restated Certificate of Incorporation to increase or decrease the number of authorized shares of Nonvoting Common Stock (but not below the number of shares thereof then outstanding) may be adopted by resolution adopted by the board of directors of the Corporation and approved by the affirmative vote of the holders of a majority of the voting power of all outstanding shares of Common Stock of the Corporation and all other outstanding shares of stock of the Corporation entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law or any similar provision hereafter enacted, with such outstanding shares of Common Stock and other stock considered for this purpose as a single class, and no vote of the holders of any shares of Nonvoting Common Stock, voting separately as a class, shall be required therefor.

(ii) Dividends. Subject to the rights of the holders of any series of Preferred Stock, holders of Common Stock and holders of Nonvoting Common Stock shall be entitled to receive such dividends and distributions (whether payable in cash or otherwise) as may be declared on the Common Shares by the board of directors of the Corporation from time to time out of assets or funds of the Corporation legally available therefor; *provided* that the board of directors of the Corporation shall declare no dividend, and no dividend shall be paid, with respect to any outstanding share of Common Stock or Nonvoting Common Stock, whether in cash or otherwise (including any dividend in shares of Common Stock on or with respect to shares of Common Stock or any dividend in shares of Nonvoting Common Stock on or with respect to shares of Nonvoting Common Stock (collectively, “Stock Dividends”)), unless, simultaneously, the same dividend is declared or paid with respect to each share of Common Stock and Nonvoting Common Stock. If a Stock Dividend is declared or paid with respect to one class, then a Stock Dividend shall likewise be declared or paid with respect to the other class and shall consist of shares of such other class in a number that bears the same relationship to the total number of shares of such other class, issued and outstanding immediately prior to the payment of such dividend, as the number of shares comprising the Stock Dividend with respect to the first referenced class bears to the total number of

shares of such first referenced class, issued and outstanding immediately prior to the payment of such dividend. Stock Dividends with respect to Common Stock may be paid only with shares of Common Stock. Stock Dividends with respect to Nonvoting Common Stock may be paid only with shares of Nonvoting Common Stock. Notwithstanding the foregoing, in the case of any dividend in the form of capital stock of a subsidiary of the Corporation, the capital stock of the subsidiary distributed to holders of Common Stock shall be identical to the capital stock of the subsidiary distributed to holders of Nonvoting Common Stock, except that the capital stock distributed to holders of Common Stock may have full or any other voting rights and the capital stock distributed to holders of Nonvoting Common Stock shall be non-voting to the same extent as the Nonvoting Common Stock is non-voting.

(iii) Subdivisions, Combinations and Mergers. If the Corporation shall in any manner split, subdivide or combine the outstanding shares of Common Stock or the outstanding shares of Nonvoting Common Stock, the outstanding shares of the other such class of the Common Shares shall likewise be split, subdivided or combined in the same manner proportionately and on the same basis per share. In the event of any merger, statutory share exchange, consolidation or similar form of corporate transaction involving the Corporation (whether or not the Corporation is the surviving entity), the holders of Common Stock and the holders of Nonvoting Common Stock shall be entitled to receive the same per share consideration, if any, except that any securities received by holders of Common Stock in consideration of such stock may have full or any other voting rights and any securities received by holders of Nonvoting Common Stock in consideration of such stock shall be non-voting to the same extent as the Nonvoting Common Stock is non-voting.

(iv) Rights on Liquidation. Subject to the rights of the holders of any series of Preferred Stock, in the event of any liquidation, dissolution or winding-up of the Corporation (whether voluntary or involuntary), the assets of the Corporation available for distribution to stockholders shall be distributed in equal amounts per share to the holders of Common Stock and the holders of Nonvoting Common Stock, as if such classes constituted a single class. For purposes of this paragraph, a merger, statutory share exchange, consolidation or similar corporate transaction involving the Corporation (whether or not the Corporation is the surviving entity), or the sale, transfer or lease by the Corporation of all or substantially all its assets, shall not constitute or be deemed a liquidation, dissolution or winding-up of the Corporation.

PREFERRED STOCK

Shares of Preferred Stock may be issued in one or more series from time to time as determined by the board of directors of the Corporation, and the board of directors of the Corporation is authorized to fix by resolution or resolutions the designations and the powers, preferences and rights, and the qualifications, limitations and restrictions thereof, of the shares of each series of Preferred Stock, including the following:

- (i) the distinctive serial designation of such series which shall distinguish it from other series;
- (ii) the number of shares included in such series;
- (iii) whether dividends shall be payable to the holders of the shares of such series and, if so, the basis on which such holders shall be entitled to receive dividends (which may include, without limitation, a right to receive such dividends or distributions as may be declared on the shares of such series by the board of directors of the Corporation, a right to receive such dividends or distributions, or any portion or multiple thereof, as may be declared on the Common Stock or any other class of stock or, in addition to or in lieu of any other right to receive dividends, a right to receive dividends at a particular rate or at a rate determined by a particular method, in which case such rate or method of determining such rate may be set forth), the form of such dividend, any conditions on which such dividends shall be payable and the date or dates, if any, on which such dividends shall be payable;
- (iv) whether dividends on the shares of such series shall be cumulative and, if so, the date or dates or method of determining the date or dates from which dividends on the shares of such series shall be cumulative;
- (v) the amount or amounts, if any, which shall be payable out of the assets of the Corporation to the holders of the shares of such series upon the voluntary or involuntary liquidation, dissolution or winding-up of the Corporation, and the relative rights of priority, if any, of payment of the shares of such series;
- (vi) the price or prices (in cash, securities or other property or a combination thereof) at which, the period or periods within which and the terms and conditions upon which the shares of such series may be redeemed, in whole or in part, at the option of the Corporation or at the option of the holder or holders thereof or upon the happening of a specified event or events;
- (vii) the obligation, if any, of the Corporation to purchase or redeem shares of such series pursuant to a sinking fund or otherwise and the price or prices (in cash, securities or other property or a combination thereof) at which, the period or periods within which and the terms and conditions upon which the shares of such series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(viii) whether or not the shares of such series shall be convertible or exchangeable, at any time or times at the option of the holder or holders thereof or at the option of the Corporation or upon the happening of a specified event or events, into shares of any other class or classes or any other series of the same or any other class or classes of stock of the Corporation or any other securities or property of the Corporation or any other entity, and the price or prices (in cash, securities or other property or a combination thereof) or rate or rates of conversion or exchange and any adjustments applicable thereto; and

(ix) whether or not the holders of the shares of such series shall have voting rights, in addition to the voting rights provided by law, and if so the terms of such voting rights, which may provide, among other things and subject to the other provisions of this Restated Certificate of Incorporation, that each share of such series shall carry one vote or more or less than one vote per share, that the holders of such series shall be entitled to vote on certain matters as a separate class (which for such purpose may be comprised solely of such series or of such series and one or more other series or classes of stock of the Corporation) and that all the shares of such series entitled to vote on a particular matter shall be deemed to be voted on such matter in the manner that a specified portion of the voting power of the shares of such series or separate class are voted on such matter.

For all purposes, this Restated Certificate of Incorporation shall include each certificate of designations (if any) setting forth the terms of a series of Preferred Stock.

Subject to the rights, if any, of the holders of any series of Preferred Stock set forth in a certificate of designations, an amendment of this Restated Certificate of Incorporation to increase or decrease the number of authorized shares of any class of Preferred Stock (but not below the number of shares thereof then outstanding) may be adopted by resolution adopted by the board of directors of the Corporation and approved by the affirmative vote of the holders of a majority of the voting power of all outstanding shares of Common Stock of the Corporation and all other outstanding shares of stock of the Corporation entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law or any similar provision hereafter enacted, with such outstanding shares of Common Stock and other stock considered for this purpose as a single class, and no vote of the holders of Preferred Stock, voting as a separate class, shall be required therefor.

Except as otherwise required by law or provided in the certificate of designations for the relevant series, holders of Common Shares, as such, shall not be entitled to vote on any amendment of this Restated Certificate of Incorporation that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other series of Preferred Stock, to vote thereon as a separate class pursuant to this Restated Certificate of Incorporation or pursuant to the Delaware General Corporation Law as then in effect.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee of the board of directors of the Corporation (the "Securities Issuance Committee"), the Securities Issuance Committee created a series of shares of Preferred Stock designated as Floating Rate Non-Cumulative Preferred Stock, Series A, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on April 22, 2005, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's Floating Rate Non-Cumulative Preferred Stock, Series A, are set forth in Appendix A hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as Floating Rate Non-Cumulative Preferred Stock, Series C, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on October 28, 2005, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's Floating Rate Non-Cumulative Preferred Stock, Series C, are set forth in Appendix B hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as Floating Rate Non-Cumulative Preferred Stock, Series D, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on May 23, 2006, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's Floating Rate Non-Cumulative Preferred Stock, Series D, are set forth in Appendix C hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as Perpetual Non-Cumulative Preferred Stock, Series E, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on May 14, 2007, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's Perpetual Non-Cumulative Preferred Stock, Series E, are set forth in Appendix D hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the

Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as Perpetual Non-Cumulative Preferred Stock, Series F, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on May 14, 2007, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's Perpetual Non-Cumulative Preferred Stock, Series F, are set forth in Appendix E hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 5.50% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series J, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on April 23, 2013, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 5.50% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series J, are set forth in Appendix F hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 6.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on April 24, 2014, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 6.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K, are set forth in Appendix G hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 5.70% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series L, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on April 24, 2014, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 5.70% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series L, are set forth in Appendix H hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 5.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series M, by filing a certificate of designations of

the Corporation with the Secretary of State of the State of Delaware on April 20, 2015, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 5.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series M, are set forth in Appendix I hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 6.30% Non-Cumulative Preferred Stock, Series N, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on February 19, 2016, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 6.30% Non-Cumulative Preferred Stock, Series N, are set forth in Appendix J hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 5.30% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series O, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on July 26, 2016, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 5.30% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series O, are set forth in Appendix K hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 5.00% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series P, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on October 27, 2017, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 5.00% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series P, are set forth in Appendix L hereto and are incorporated herein by reference.

Pursuant to the authority conferred by this Article FOURTH upon the board of directors of the Corporation and authority delegated by the board of directors to the Securities Issuance Committee, the Securities Issuance Committee created a series of shares of Preferred Stock designated as 5.50% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series Q, by filing a certificate of designations of the Corporation with the Secretary of State of the State of Delaware on June 14, 2019, and the voting powers, designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of the Corporation's 5.50%

Fixed-Rate Reset Non-Cumulative Preferred Stock, Series Q, are set forth in Appendix M hereto and are incorporated herein by reference.

OPTIONS, WARRANTS AND OTHER RIGHTS

The board of directors of the Corporation is authorized to create and issue options, warrants and other rights from time to time entitling the holders thereof to purchase securities or other property of the Corporation or any other entity, including any class or series of stock of the Corporation or any other entity and whether or not in connection with the issuance or sale of any securities or other property of the Corporation, for such consideration (if any), at such times and upon such other terms and conditions as may be determined or authorized by the board of directors of the Corporation and set forth in one or more agreements or instruments. Among other things and without limitation, such terms and conditions may provide for the following:

- (i) adjusting the number or exercise price of such options, warrants or other rights or the amount or nature of the securities or other property receivable upon exercise thereof in the event of a subdivision or combination of any securities, or a recapitalization, of the Corporation, the acquisition by any person of beneficial ownership of securities representing more than a designated percentage of the voting power of any outstanding series, class or classes of securities, a change in ownership of the Corporation's securities or a merger, statutory share exchange, consolidation, reorganization, sale of assets or other occurrence relating to the Corporation or any of its securities, and restricting the ability of the Corporation to enter into an agreement with respect to any such transaction absent an assumption by another party or parties thereto of the obligations of the Corporation under such options, warrants or other rights;
- (ii) restricting, precluding or limiting the exercise, transfer or receipt of such options, warrants or other rights by any person that becomes the beneficial owner of a designated percentage of the voting power of any outstanding series, class or classes of securities of the Corporation or any direct or indirect transferee of such a person, or invalidating or voiding such options, warrants or other rights held by any such person or transferee; and
- (iii) permitting the board of directors (or certain directors specified or qualified by the terms of the governing instruments of such options, warrants or other rights) to redeem, terminate or exchange such options, warrants or other rights.

This paragraph shall not be construed in any way to limit the power of the board of directors of the Corporation to create and issue options, warrants or other rights.

FIFTH. [Reserved]

SIXTH. All corporate powers shall be exercised by the board of directors of the Corporation, except as otherwise specifically required by law or as otherwise provided in this Restated Certificate of Incorporation. Any meeting of stockholders may be postponed by action of the board of directors at any time in advance of such meeting. The board of directors of the Corporation shall have the power to adopt such rules and regulations for the conduct of the meetings and management of the affairs of the

Corporation as they may deem proper and the power to adjourn any meeting of stockholders without a vote of the stockholders, which powers may be delegated by the board of directors to the chairman of such meeting either in such rules and regulations or pursuant to the by-laws of the Corporation.

Special meetings of stockholders of the Corporation may be called at any time by, but only by, the board of directors of the Corporation or, as and to the extent required by the by-laws of the Corporation, by the Secretary of the Corporation upon the written request of the holders of record of not less than 25% of the voting power of all outstanding shares of Common Stock of the Corporation, such voting power to be calculated and determined in the manner specified, and with any limitations as may be set forth, in the Corporation's by-laws (the "Requisite Percent"). Each special meeting shall be held at such date, time and place either within or without the State of Delaware as may be stated in the notice of the meeting.

The board of directors of the Corporation is authorized to adopt, amend or repeal by-laws of the Corporation. No adoption, amendment or repeal of a by-law by action of stockholders shall be effective unless approved by the affirmative vote of not less than a majority of shares present in person or represented by proxy at the meeting and entitled to vote on such matter, with all shares of Common Stock of the Corporation and other stock of the Corporation entitled to vote on such matter considered for this purpose as a single class; for purposes of this sentence votes cast "for" or "against" and "abstentions" with respect to such matter shall be counted as shares of stock of the Corporation entitled to vote on such matter, while "broker nonvotes" (or other shares of stock of the Corporation similarly not entitled to vote) shall not be counted as shares entitled to vote on such matter. Any vote of stockholders required by this Article SIXTH shall be in addition to any other vote of stockholders that may be required by law, this Restated Certificate of Incorporation, the by-laws of the Corporation, any agreement with a national securities exchange or otherwise.

SEVENTH. Elections of directors need not be by written ballot except and to the extent provided in the by-laws of the Corporation.

EIGHTH. The number of directors of the Corporation shall be fixed only by resolution of the board of directors of the Corporation from time to time. Each director who is serving as a director on the date of this Restated Certificate of Incorporation shall hold office until the next annual meeting of stockholders after such date and until his or her successor has been duly elected and qualified, notwithstanding that such director may have been elected for a term that extended beyond the date of such next annual meeting of stockholders. At each annual meeting of stockholders after the date of this Restated Certificate of Incorporation, directors elected at such annual meeting shall hold office until the next annual meeting of stockholders and until their successors have been duly elected and qualified.

Vacancies and newly created directorships resulting from any increase in the authorized number of directors or from any other cause (other than vacancies and newly created directorships which the holders of any class or classes of stock or series

thereof are expressly entitled by this Restated Certificate of Incorporation to fill) shall be filled by, and only by, a majority of the directors then in office, although less than a quorum, or by the sole remaining director. Any director appointed to fill a vacancy or a newly created directorship shall hold office until the next annual meeting of stockholders, and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

Notwithstanding the foregoing, in the event that the holders of any class or series of Preferred Stock of the Corporation shall be entitled, voting separately as a class, to elect any directors of the Corporation, then the number of directors that may be elected by such holders voting separately as a class shall be in addition to the number fixed pursuant to a resolution of the board of directors of the Corporation. Except as otherwise provided in the terms of such class or series, (i) the terms of the directors elected by such holders voting separately as a class shall expire at the annual meeting of stockholders next succeeding their election and (ii) any director or directors elected by such holders voting separately as a class may be removed, with or without cause, by the holders of a majority of the voting power of all outstanding shares of stock of the Corporation entitled to vote separately as a class in an election of such directors.

NINTH. In taking any action, including action that may involve or relate to a change or potential change in the control of the Corporation, a director of the Corporation may consider, among other things, both the long-term and short-term interests of the Corporation and its stockholders and the effects that the Corporation's actions may have in the short term or long term upon any one or more of the following matters:

- (i) the prospects for potential growth, development, productivity and profitability of the Corporation;
- (ii) the Corporation's current employees;
- (iii) the retired former partners of The Goldman Sachs Group, L.P. ("GS Group") and the Corporation's employees and other beneficiaries receiving or entitled to receive retirement, welfare or similar benefits from or pursuant to any plan sponsored, or agreement entered into, by the Corporation;
- (iv) the Corporation's customers and creditors;
- (v) the ability of the Corporation to provide, as a going concern, goods, services, employment opportunities and employment benefits and otherwise to contribute to the communities in which it does business; and
- (vi) such other additional factors as a director may consider appropriate in such circumstances.

Nothing in this Article NINTH shall create any duty owed by any director of the Corporation to any person or entity to consider, or afford any particular weight to, any of the foregoing matters or to limit his or her consideration to the foregoing matters. No such employee, retired former partner of GS Group, former employee, beneficiary,

customer, creditor or community or member thereof shall have any rights against any director of the Corporation or the Corporation under this Article NINTH.

TENTH. From and after the consummation of the initial public offering of the shares of Common Stock of the Corporation, no action of stockholders of the Corporation required or permitted to be taken at any annual or special meeting of stockholders of the Corporation may be taken without a meeting of stockholders, without prior notice and without a vote, and the power of stockholders of the Corporation to consent in writing to the taking of any action without a meeting is specifically denied. Notwithstanding this Article TENTH, the holders of any series of Preferred Stock of the Corporation shall be entitled to take action by written consent to such extent, if any, as may be provided in the terms of such series.

ELEVENTH. [Reserved]

TWELFTH. A director of the Corporation shall not be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director of the Corporation, except to the extent that such exemption from liability or limitation thereof is not permitted under the Delaware General Corporation Law as currently in effect or as the same may hereafter be amended.

Pursuant to the Plan of Incorporation of GS Group, dated as of March 8, 1999, as currently in effect or as the same may hereafter be amended (the "Plan"), the Corporation has the right, but not the obligation, to make special arrangements with any person who was a partner of GS Group participating in the Plan to ameliorate, in whole or in part, certain significantly disproportionate tax or other burdens. The board of directors of the Corporation is authorized to cause the Corporation to make such arrangements (which may include special payments) as the board of directors of the Corporation may, in its sole discretion, deem appropriate to effectuate the intent of the relevant provision of the Plan and the Corporation and each stockholder of the Corporation shall, to the fullest extent permitted by law, be deemed to have approved and ratified any such determination and to have waived any claim or objection on behalf of the Corporation or any such stockholder arising out of the making of such arrangements.

Pursuant to the Plan, the Corporation has the right, but not the obligation, to register with the Securities and Exchange Commission the resale of certain securities of the Corporation by directors, employees and former directors and employees of the Corporation and its subsidiaries and affiliates and former partners and employees of GS Group and its subsidiaries and affiliates and to undertake various actions and to enter into agreements and arrangements in connection therewith (collectively, the "Registration Arrangements"). The board of directors of the Corporation is authorized to cause the Corporation to undertake such Registration Arrangements as the board of directors of the Corporation may, in its sole discretion, deem appropriate and the Corporation and each stockholder of the Corporation shall, to the fullest extent permitted by law, be deemed to have approved and ratified any such determination and

to have waived any claim or objection on behalf of the Corporation or any such stockholder arising out of the undertaking of such Registration Arrangements.

The Corporation and each stockholder of the Corporation shall, to the fullest extent permitted by law, be deemed to have approved and ratified any decision by the board of directors of the Corporation to make the Contribution referred to in Article THIRD, including the amount thereof (up to the limit specified in Article THIRD) and to have waived any claim or objection on behalf of the Corporation or any such stockholder arising out of any such decision to make, or the making of, the Contribution.

The authorizations, approvals and ratifications contained in the second, third and fourth paragraphs of this Article TWELFTH shall not be construed to indicate that any other arrangements or contributions not specifically referred to in such paragraphs are, by reason of such omission, not within the power and authority of the board of directors of the Corporation or that the determination of the board of directors of the Corporation with respect thereto should be judged by any legal standard other than that which would have applied but for the inclusion of the second, third and fourth paragraphs of this Article TWELFTH.

No amendment, modification or repeal of this Article TWELFTH shall adversely affect any right or protection of a director of the Corporation that exists at the time of such amendment, modification or repeal.

IN WITNESS WHEREOF, the Corporation has caused this Restated Certificate of Incorporation to be signed and attested by its duly authorized officer on this 29th day of October, 2019.

By: /s/ Karen P. Seymour
Name: Karen P. Seymour
Title: Executive Vice President and General Counsel

CERTIFICATE OF DESIGNATIONS
OF
FLOATING RATE NON-CUMULATIVE PREFERRED STOCK, SERIES A
OF
THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the "Committee") of the board of directors of the Corporation (the "Board of Directors"), in accordance with the resolutions of the Board of Directors dated April 6, 2005, the provisions of the amended and restated certificate of incorporation and bylaws of the Corporation and applicable law, by unanimous written consent dated April 18, 2005, adopted the following resolution creating a series of 50,000 shares of Preferred Stock of the Corporation designated as "Floating Rate Non-Cumulative Preferred Stock, Series A".

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated April 6, 2005, the provisions of the amended and restated certificate of incorporation and bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is "Floating Rate Non-Cumulative Preferred Stock, Series A" ("Series A"). Each share of Series A shall be identical in all respects to every other share of Series A, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series A shall be 50,000. Shares of Series A that are redeemed, purchased or otherwise acquired by the Corporation, or converted into another series of Preferred Stock, shall be cancelled and shall revert to authorized but unissued shares of Series A.

Section 3. Definitions. As used herein with respect to Series A:

(a) "Board of Directors" means the board of directors of the Corporation.

(b) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(c) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(d) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series A is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(e) “Certificate of Designations” means this Certificate of Designations relating to the Series A, as it may be amended from time to time.

(f) “Certification of Incorporation” shall mean the amended and restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(g) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(h) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series A) that ranks junior to Series A either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(i) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(j) “Moneyline Telerate Page” means the display on Moneyline Telerate, Inc., or any successor service, on the page or pages specified in Section 4 below or any replacement page or pages on that service.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series A) that ranks equally with Series A both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series A.

(m) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(n) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 8(b) below) or any other matter as to which the holders of Series A are entitled to vote as specified in Section 8 of this Certificate of Designations, any and all series of Preferred Stock (other than Series A) that rank equally with Series A either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series A shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series A. Such dividends shall be payable quarterly in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on February 10, May 10, August 10 and November 10 (“Dividend Payment Dates”), commencing on August 10, 2005; *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series A on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day, unless such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall instead be payable on) the immediately preceding Business Day. Dividends on Series A shall not be cumulative; holders of Series A shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends that are payable on Series A on any Dividend Payment Date will be payable to holders of record of Series A as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence

on and include the date of original issue of the Series A, *provided that*, for any share of Series A issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series A in respect of any Dividend Period shall be computed by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series A, for each Dividend Period, shall be a rate per annum equal to the greater of (1) 0.75% above LIBOR (as defined below) for such Dividend Period and (2) 3.75% LIBOR, with respect to any Dividend Period, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Moneyline Telerate Page 3750 as of 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on Moneyline Telerate Page 3750, LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M. New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If fewer than three banks selected by the Calculation Agent are quoting as described in the preceding paragraph, LIBOR for such Dividend Period shall be LIBOR in effect for the prior Dividend Period.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices and will be available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series A shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series A as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series A remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series A have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series A and any shares of Parity Stock, all dividends declared on the Series A and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series A and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series A shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series A shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to

stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series A as to such distribution, in full an amount equal to \$25,000 per share (the "Series A Liquidation Amount"), together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series A and all holders of any stock of the Corporation ranking equally with the Series A as to such distribution, the amounts paid to the holders of Series A and to the holders of all such other stock shall be paid pro rata in accordance with the respective aggregate Liquidation Preferences of the holders of Series A and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series A and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series A, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series A receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series A may not be redeemed by the Corporation prior to April 25, 2010. On or after April 25, 2010, the Corporation, at its option, may redeem, in whole at any time or in part from time to time, the shares of Series A at the time outstanding, upon notice given as provided in Section 6(c) below, at a redemption price equal to \$25,000 per share, together (except as otherwise provided herein below) with an amount equal to any dividends that have been declared but not paid prior to the redemption date (but with no amount in respect of any dividends that have not been declared prior to such date). The redemption price for any shares of Series A shall be payable on the redemption date to the holder of such shares against surrender of the

certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above.

(b) **No Sinking Fund.** The Series A will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series A will have no right to require redemption of any shares of Series A.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series A shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series A designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series A. Notwithstanding the foregoing, if the Series A or any depository shares representing interests in the Series A are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series A at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series A to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series A at the time outstanding, the shares to be redeemed shall be selected either pro rata or in such other manner as the Corporation may determine to be fair and equitable. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series A shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the pro rata benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed

outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Conversion Upon Regulatory Changes. If both (i) and (ii) below occur:

(i) after the date of the issuance of the Series A, the Corporation (by election or otherwise) becomes subject to any law, rule, regulation or guidance (together, "Regulations") relating to its capital adequacy, which Regulation (x) modifies the existing requirements for treatment as Allowable Capital (as defined under the Securities and Exchange Commission rules relating to consolidated supervised entities as in effect from time to time), (y) provides for a type or level of capital characterized as "Tier 1" or its equivalent pursuant to Regulations of any governmental agency, authority or other body having regulatory jurisdiction over the Corporation (or any of its subsidiaries or consolidated affiliates) and implementing the capital standards published by the Basel Committee on Banking Supervision, the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System or any other United States national governmental agency, authority or other body, or any other applicable regime based on capital standards published by the Basel Committee on Banking Supervision or its successor, or (z) provides for a type or level of capital that in the judgment of the Corporation (after consultation with legal counsel of recognized standing) is substantially equivalent to such "Tier 1" capital (such capital described in either (y) or (z) above is referred to below as "Tier 1 Capital Equivalent"), and

(ii) the Corporation affirmatively elects to qualify the Series A for treatment as Allowable Capital or Tier 1 Capital Equivalent without any sublimit or other quantitative restriction on the inclusion of the Series A in Allowable Capital or Tier 1 Capital Equivalent (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) under such Regulations,

then, upon such affirmative election, the Series A shall be convertible at the Corporation's option into a new series of Preferred Stock having terms and provisions substantially identical to those of the Series A, except that such new series may have such additional or modified rights, preferences, privileges and voting powers, and limitations and restrictions thereof, as are necessary in the judgment of the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) (after consultation with legal counsel of recognized standing) to comply with the Required Unrestricted Capital Provisions (as defined below), *provided* that the Corporation will not cause any such conversion unless the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) determines that the rights, preferences, privileges and

voting powers, and the qualifications, limitations and restrictions thereof, of such new series of Preferred Stock, taken as a whole, are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of the Series A, taken as a whole.

As used above, the term “Required Unrestricted Capital Provisions” means such terms and provisions as are, in the judgment of the Corporation (after consultation with counsel of recognized standing), required for preferred stock to be treated as Allowable Capital or Tier 1 Capital Equivalent, as applicable, without any sublimit or other quantitative restriction on the inclusion of such preferred stock in Allowable Capital or Tier 1 Capital Equivalent, as applicable (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) pursuant to the applicable Regulations.

The Corporation shall provide notice to the holders of Series A of any election to qualify the Series A for Allowable Capital or Tier 1 Capital Equivalent treatment and of any determination to convert the Series A into a new series of Preferred Stock pursuant to the terms of this Section 7, promptly upon the effectiveness of any such election or determination. A copy of such notice and of the relevant Regulations shall be maintained on file at the principal offices of the Corporation and, upon request, will be made available to any stockholder of the Corporation. Any conversion of the Series A pursuant to this Section 7 shall be effected pursuant to such procedures as the Corporation may determine and publicly disclose.

Except as specified in this Section 7, holders of Series A shares shall have no right to exchange or convert such shares into any other securities.

Section 8. Voting Rights.

(a) **General.** The holders of Series A shall not have any voting rights except as set forth below or as otherwise from to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series A shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a “Nonpayment Event”), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series A, together with the holders of any outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the “Preferred Stock Directors”), *provided* that it shall be a qualification for election for any such Preferred Stock Director that the election of such director shall not cause the Corporation to violate the corporate governance requirement of the New York Stock Exchange (or any other securities exchange or other trading facility on which securities of the Corporation may then be listed or traded) that listed or traded companies must have a majority of independent directors.

In the event that the holders of the Series A, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock

Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series A or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series A or Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 10 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series A for at least four Dividend Periods (whether or not consecutive) after a Nonpayment Event, then the right of the holders of Series A to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series A and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of the outstanding shares of the Series A and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of the outstanding shares of the Series A and all Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series A are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the

shares of Series A and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series A with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series A.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series A, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series A, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series A remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series A immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 8(c), any increase in the amount of the authorized or issued Series A or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series A with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the special rights, preferences, privileges or voting powers of the Series A. In addition, any conversion of the Series A pursuant to Section 7 above shall not be deemed to adversely affect the rights, preferences, privileges and voting powers of the Series A.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 8(c) would adversely affect the Series A and one or more but not all other series of Preferred Stock, then only the Series A and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series A, so long as such action does not adversely affect the special rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series A, the Corporation may amend, alter, supplement or repeal any terms of the Series A:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series A that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series A shall be required pursuant to Section 8(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series A shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series A (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the Bylaws, applicable law and any national securities exchange or other trading facility on which the Series A is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series A and any Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series A are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 9. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series A may deem and treat the record holder of any share of Series A as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 10. Notices. All notices or communications in respect of Series A shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or Bylaws or by applicable law.

Section 11. No Preemptive Rights. No share of Series A shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 12. Other Rights. The shares of Series A shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS
OF
FLOATING RATE NON-CUMULATIVE PREFERRED STOCK, SERIES C
OF
THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the "Committee") of the board of directors of the Corporation (the "Board of Directors"), in accordance with the resolutions of the Board of Directors dated September 16, 2005, the provisions of the amended and restated certificate of incorporation and bylaws of the Corporation and applicable law, by unanimous written consent dated October 25, 2005, adopted the following resolution creating a series of 25,000 shares of Preferred Stock of the Corporation designated as "Floating Rate Non-Cumulative Preferred Stock, Series C".

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated September 16, 2005, the provisions of the amended and restated certificate of incorporation and bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is "Floating Rate Non-Cumulative Preferred Stock, Series C" ("Series C"). Each share of Series C shall be identical in all respects to every other share of Series C, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series C shall be 25,000. Shares of Series C that are redeemed, purchased or otherwise acquired by the Corporation, or converted into another series of Preferred Stock, shall be cancelled and shall revert to authorized but unissued shares of Series C.

Section 3. Definitions. As used herein with respect to Series C:

(a) "Board of Directors" means the board of directors of the Corporation.

(b) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(c) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(d) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series C is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(e) “Certificate of Designations” means this Certificate of Designations relating to the Series C, as it may be amended from time to time.

(f) “Certification of Incorporation” shall mean the amended and restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(g) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(h) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series C) that ranks junior to Series C either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(i) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(j) “Moneyline Telerate Page” means the display on Moneyline Telerate, Inc., or any successor service, on the page or pages specified in Section 4 below or any replacement page or pages on that service.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series C) that ranks equally with Series C both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series C.

(m) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(n) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 8(b) below) or any other matter as to which the holders of Series C are entitled to vote as specified in Section 8 of this Certificate of Designations, any and all series of Preferred Stock (other than Series C) that rank equally with Series C either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series C shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series C. Such dividends shall be payable quarterly in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on February 10, May 10, August 10 and November 10 (“Dividend Payment Dates”), commencing on February 10, 2006; *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series C on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day, unless such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall instead be payable on) the immediately preceding Business Day. Dividends on Series C shall not be cumulative; holders of Series C shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends that are payable on Series C on any Dividend Payment Date will be payable to holders of record of Series C as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence

on and include the date of original issue of the Series C, *provided that*, for any share of Series C issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series C in respect of any Dividend Period shall be computed by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series C, for each Dividend Period, shall be a rate per annum equal to the greater of (1) 0.75% above LIBOR (as defined below) for such Dividend Period and (2) 4.00%. LIBOR, with respect to any Dividend Period, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Moneyline Telerate Page 3750 as of 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on Moneyline Telerate Page 3750, LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M. New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If fewer than three banks selected by the Calculation Agent are quoting as described in the preceding paragraph, LIBOR for such Dividend Period shall be LIBOR in effect for the prior Dividend Period.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices and will be available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series C shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series C as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series C remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series C have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series C and any shares of Parity Stock, all dividends declared on the Series C and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series C and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series C shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series C shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to

stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series C as to such distribution, in full an amount equal to \$25,000 per share (the "Series C Liquidation Amount"), together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series C and all holders of any stock of the Corporation ranking equally with the Series C as to such distribution, the amounts paid to the holders of Series C and to the holders of all such other stock shall be paid pro rata in accordance with the respective aggregate Liquidation Preferences of the holders of Series C and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series C and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series C, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series C receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series C may not be redeemed by the Corporation prior to October 31, 2010. On or after October 31, 2010, the Corporation, at its option, may redeem, in whole at any time or in part from time to time, the shares of Series C at the time outstanding, upon notice given as provided in Section 6(c) below, at a redemption price equal to \$25,000 per share, together (except as otherwise provided herein below) with an amount equal to any dividends that have been declared but not paid prior to the redemption date (but with no amount in respect of any dividends that have not been declared prior to such date). The redemption price for any shares of Series C shall be payable on the redemption date to the holder of such shares against surrender of the

certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above.

(b) **No Sinking Fund.** The Series C will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series C will have no right to require redemption of any shares of Series C.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series C shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series C designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series C. Notwithstanding the foregoing, if the Series C or any depositary shares representing interests in the Series C are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series C at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series C to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series C at the time outstanding, the shares to be redeemed shall be selected either pro rata or in such other manner as the Corporation may determine to be fair and equitable. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series C shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the pro rata benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed

outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Conversion Upon Regulatory Changes. If both (i) and (ii) below occur:

(i) after the date of the issuance of the Series C, the Corporation (by election or otherwise) becomes subject to any law, rule, regulation or guidance (together, "Regulations") relating to its capital adequacy, which Regulation (x) modifies the existing requirements for treatment as Allowable Capital (as defined under the Securities and Exchange Commission rules relating to consolidated supervised entities as in effect from time to time), (y) provides for a type or level of capital characterized as "Tier 1" or its equivalent pursuant to Regulations of any governmental agency, authority or other body having regulatory jurisdiction over the Corporation (or any of its subsidiaries or consolidated affiliates) and implementing the capital standards published by the Basel Committee on Banking Supervision, the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System or any other United States national governmental agency, authority or other body, or any other applicable regime based on capital standards published by the Basel Committee on Banking Supervision or its successor, or (z) provides for a type or level of capital that in the judgment of the Corporation (after consultation with legal counsel of recognized standing) is substantially equivalent to such "Tier 1" capital (such capital described in either (y) or (z) above is referred to below as "Tier 1 Capital Equivalent"), and

(ii) the Corporation affirmatively elects to qualify the Series C for treatment as Allowable Capital or Tier 1 Capital Equivalent without any sublimit or other quantitative restriction on the inclusion of the Series C in Allowable Capital or Tier 1 Capital Equivalent (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) under such Regulations,

then, upon such affirmative election, the Series C shall be convertible at the Corporation's option into a new series of Preferred Stock having terms and provisions substantially identical to those of the Series C, except that such new series may have such additional or modified rights, preferences, privileges and voting powers, and limitations and restrictions thereof, as are necessary in the judgment of the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) (after consultation with legal counsel of recognized standing) to comply with the Required Unrestricted Capital Provisions (as defined below), *provided* that the Corporation will not cause any such conversion unless the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) determines that the rights, preferences, privileges and

voting powers, and the qualifications, limitations and restrictions thereof, of such new series of Preferred Stock, taken as a whole, are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of the Series C, taken as a whole.

As used above, the term “Required Unrestricted Capital Provisions” means such terms and provisions as are, in the judgment of the Corporation (after consultation with counsel of recognized standing), required for preferred stock to be treated as Allowable Capital or Tier 1 Capital Equivalent, as applicable, without any sublimit or other quantitative restriction on the inclusion of such preferred stock in Allowable Capital or Tier 1 Capital Equivalent, as applicable (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) pursuant to the applicable Regulations.

The Corporation shall provide notice to the holders of Series C of any election to qualify the Series C for Allowable Capital or Tier 1 Capital Equivalent treatment and of any determination to convert the Series C into a new series of Preferred Stock pursuant to the terms of this Section 7, promptly upon the effectiveness of any such election or determination. A copy of such notice and of the relevant Regulations shall be maintained on file at the principal offices of the Corporation and, upon request, will be made available to any stockholder of the Corporation. Any conversion of the Series C pursuant to this Section 7 shall be effected pursuant to such procedures as the Corporation may determine and publicly disclose.

Except as specified in this Section 7, holders of Series C shares shall have no right to exchange or convert such shares into any other securities.

Section 8. Voting Rights.

(a) **General.** The holders of Series C shall not have any voting rights except as set forth below or as otherwise from to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series C shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a “Nonpayment Event”), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series C, together with the holders of any outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the “Preferred Stock Directors”), *provided* that it shall be a qualification for election for any such Preferred Stock Director that the election of such director shall not cause the Corporation to violate the corporate governance requirement of the New York Stock Exchange (or any other securities exchange or other trading facility on which securities of the Corporation may then be listed or traded) that listed or traded companies must have a majority of independent directors and *provided further* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series C, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series C or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series C or Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 10 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series C for at least four Dividend Periods (whether or not consecutive) after a Nonpayment Event, then the right of the holders of Series C to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series C and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of the outstanding shares of the Series C and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of the outstanding shares of the Series C and all Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series C are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series C and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series C with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series C.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series C, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series C, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series C remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series C immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 8(c), any increase in the amount of the authorized or issued Series C or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series C with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series C. In addition, any conversion of the Series C pursuant to Section 7 above shall not be deemed to adversely affect the rights, preferences, privileges and voting powers of the Series C.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 8(c) would adversely affect the Series C and one or more but not all other series of Preferred Stock, then only the Series C and such

series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series C, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series C, the Corporation may amend, alter, supplement or repeal any terms of the Series C:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series C that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series C shall be required pursuant to Section 8(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series C shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series C (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the Bylaws, applicable law and any national securities exchange or other trading facility on which the Series C is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series C and any Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series C are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 9. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series C may deem and treat the record holder of any share of Series C as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 10. Notices. All notices or communications in respect of Series C shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this

Certificate of Designations, in the Certificate of Incorporation or Bylaws or by applicable law.

Section 11. No Preemptive Rights. No share of Series C shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 12. Other Rights. The shares of Series C shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS
OF
FLOATING RATE NON-CUMULATIVE PREFERRED STOCK, SERIES D
OF
THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the "Committee") of the board of directors of the Corporation (the "Board of Directors"), in accordance with the resolutions of the Board of Directors dated September 16, 2005, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, by unanimous written consent dated May 16, 2005, adopted the following resolution creating a series of 60,000 shares of Preferred Stock of the Corporation designated as "Floating Rate Non-Cumulative Preferred Stock, Series D".

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated September 16, 2005, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is "Floating Rate Non-Cumulative Preferred Stock, Series D" ("Series D"). Each share of Series D shall be identical in all respects to every other share of Series D, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series D shall be 60,000. Shares of Series D that are redeemed, purchased or otherwise acquired by the Corporation, or converted into another series of Preferred Stock, shall be cancelled and shall revert to authorized but unissued shares of Series D.

Section 3. Definitions. As used herein with respect to Series D:

(a) "Board of Directors" means the board of directors of the Corporation.

(b) "ByLaws" means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(c) "Business Day" means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(d) "Calculation Agent" means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series D is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(e) "Certificate of Designations" means this Certificate of Designations relating to the Series D, as it may be amended from time to time.

(f) "Certification of Incorporation" shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(g) "Common Stock" means the common stock, par value \$0.01 per share, of the Corporation.

(h) "Junior Stock" means the Common Stock and any other class or series of stock of the Corporation (other than Series D) that ranks junior to Series D either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(i) "London Business Day" means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(j) "Moneyline Telerate Page" means the display on Moneyline Telerate, Inc., or any successor service, on the page or pages specified in Section 4 below or any replacement page or pages on that service.

(k) "Parity Stock" means any class or series of stock of the Corporation (other than Series D) that ranks equally with Series D both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) "Preferred Stock" means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series D.

(m) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(n) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 8(b) below) or any other matter as to which the holders of Series D are entitled to vote as specified in Section 8 of this Certificate of Designations, any and all series of Preferred Stock (other than Series D) that rank equally with Series D either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series D shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series D. Such dividends shall be payable quarterly in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on February 10, May 10, August 10 and November 10 (“Dividend Payment Dates”), commencing on August 10, 2006; *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series D on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day, unless such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall instead be payable on) the immediately preceding Business Day. Dividends on Series D shall not be cumulative; holders of Series D shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends that are payable on Series D on any Dividend Payment Date will be payable to holders of record of Series D as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence

on and include the date of original issue of the Series D, *provided* that, for any share of Series D issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series D in respect of any Dividend Period shall be computed by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series D, for each Dividend Period, shall be a rate per annum equal to the greater of (1) 0.67% above LIBOR (as defined below) for such Dividend Period and (2) 4.00%. LIBOR, with respect to any Dividend Period, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Moneyline Telerate Page 3750 (or any successor or replacement page) as of 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on Moneyline Telerate Page 3750 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M. New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If fewer than three banks selected by the Calculation Agent are quoting as described in the preceding paragraph, LIBOR for such Dividend Period shall be LIBOR in effect for the prior Dividend Period.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices and will be available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series D shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series D as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series D remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series D have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series D and any shares of Parity Stock, all dividends declared on the Series D and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series D and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series D shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series D shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to

stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series D as to such distribution, in full an amount equal to \$25,000 per share (the "Series D Liquidation Amount"), together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series D and all holders of any stock of the Corporation ranking equally with the Series D as to such distribution, the amounts paid to the holders of Series D and to the holders of all such other stock shall be paid pro rata in accordance with the respective aggregate Liquidation Preferences of the holders of Series D and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series D and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series D, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series D receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series D may not be redeemed by the Corporation prior to May 24, 2011. On or after May 24, 2011, the Corporation, at its option, may redeem, in whole at any time or in part from time to time, the shares of Series D at the time outstanding, upon notice given as provided in Section 6(c) below, at a redemption price equal to \$25,000 per share, together (except as otherwise provided hereinbelow) with an amount equal to any dividends that have been declared but not paid prior to the redemption date (but with no amount in respect of any dividends that have not been declared prior to such date). The redemption price for any shares of Series D shall be payable on the redemption date to the holder of such shares against surrender of the

certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above.

(b) **No Sinking Fund.** The Series D will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series D will have no right to require redemption of any shares of Series D.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series D shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series D designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series D. Notwithstanding the foregoing, if the Series D or any depositary shares representing interests in the Series D are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series D at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series D to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series D at the time outstanding, the shares to be redeemed shall be selected either pro rata or in such other manner as the Corporation may determine to be fair and equitable. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series D shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the pro rata benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed

outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Conversion Upon Regulatory Changes. If both (i) and (ii) below occur:

(i) after the date of the issuance of the Series D, the Corporation (by election or otherwise) becomes subject to any law, rule, regulation or guidance (together, "Regulations") relating to its capital adequacy, which Regulation (x) modifies the existing requirements for treatment as Allowable Capital (as defined under the Securities and Exchange Commission rules relating to consolidated supervised entities as in effect from time to time), (y) provides for a type or level of capital characterized as "Tier 1" or its equivalent pursuant to Regulations of any governmental agency, authority or other body having regulatory jurisdiction over the Corporation (or any of its subsidiaries or consolidated affiliates) and implementing the capital standards published by the Basel Committee on Banking Supervision, the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System or any other United States national governmental agency, authority or other body, or any other applicable regime based on capital standards published by the Basel Committee on Banking Supervision or its successor, or (z) provides for a type or level of capital that in the judgment of the Corporation (after consultation with legal counsel of recognized standing) is substantially equivalent to such "Tier 1" capital (such capital described in either (y) or (z) above is referred to below as "Tier 1 Capital Equivalent"), and

(ii) the Corporation affirmatively elects to qualify the Series D for treatment as Allowable Capital or Tier 1 Capital Equivalent without any sublimit or other quantitative restriction on the inclusion of the Series D in Allowable Capital or Tier 1 Capital Equivalent (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) under such Regulations,

then, upon such affirmative election, the Series D shall be convertible at the Corporation's option into a new series of Preferred Stock having terms and provisions substantially identical to those of the Series D, except that such new series may have such additional or modified rights, preferences, privileges and voting powers, and limitations and restrictions thereof, as are necessary in the judgment of the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) (after consultation with legal counsel of recognized standing) to comply with the Required Unrestricted Capital Provisions (as defined below), *provided* that the Corporation will not cause any such conversion unless the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) determines that the rights, preferences, privileges and

voting powers, and the qualifications, limitations and restrictions thereof, of such new series of Preferred Stock, taken as a whole, are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of the Series D, taken as a whole.

As used above, the term “Required Unrestricted Capital Provisions” means such terms and provisions as are, in the judgment of the Corporation (after consultation with counsel of recognized standing), required for preferred stock to be treated as Allowable Capital or Tier 1 Capital Equivalent, as applicable, without any sublimit or other quantitative restriction on the inclusion of such preferred stock in Allowable Capital or Tier 1 Capital Equivalent, as applicable (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) pursuant to the applicable Regulations.

The Corporation shall provide notice to the holders of Series D of any election to qualify the Series D for Allowable Capital or Tier 1 Capital Equivalent treatment and of any determination to convert the Series D into a new series of Preferred Stock pursuant to the terms of this Section 7, promptly upon the effectiveness of any such election or determination. A copy of such notice and of the relevant Regulations shall be maintained on file at the principal offices of the Corporation and, upon request, will be made available to any stockholder of the Corporation. Any conversion of the Series D pursuant to this Section 7 shall be effected pursuant to such procedures as the Corporation may determine and publicly disclose.

Except as specified in this Section 7, holders of Series D shares shall have no right to exchange or convert such shares into any other securities.

Section 8. Voting Rights.

(a) **General.** The holders of Series D shall not have any voting rights except as set forth below or as otherwise from to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series D shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a “Nonpayment Event”), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series D, together with the holders of any outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the “Preferred Stock Directors”), *provided* that it shall be a qualification for election for any such Preferred Stock Director that the election of such director shall not cause the Corporation to violate the corporate governance requirement of the New York Stock Exchange (or any other securities exchange or other trading facility on which securities of the Corporation may then be listed or traded) that listed or traded companies must have a majority of independent directors and *provided further* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series D, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series D or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series D or Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 10 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series D for at least four Dividend Periods (whether or not consecutive) after a Nonpayment Event, then the right of the holders of Series D to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series D and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of the outstanding shares of the Series D and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of the outstanding shares of the Series D and all Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series D are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series D and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series D with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series D.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series D, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series D, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series D remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series D immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 8(c), any increase in the amount of the authorized or issued Series D or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series D with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series D. In addition, any conversion of the Series D pursuant to Section 7 above shall not be deemed to adversely affect the rights, preferences, privileges and voting powers of the Series D.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 8(c) would adversely affect the Series D and one or more but not all other series of Preferred Stock, then only the Series D and such

series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series D, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series D, the Corporation may amend, alter, supplement or repeal any terms of the Series D:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series D that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series D shall be required pursuant to Section 8(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series D shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series D (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the Bylaws, applicable law and any national securities exchange or other trading facility on which the Series D is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series D and any Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series D are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 9. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series D may deem and treat the record holder of any share of Series D as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 10. Notices. All notices or communications in respect of Series D shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this

Certificate of Designations, in the Certificate of Incorporation or Bylaws or by applicable law.

Section 11. No Preemptive Rights. No share of Series D shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 12. Other Rights. The shares of Series D shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS
OF
PERPETUAL NON-CUMULATIVE PREFERRED STOCK, SERIES E
OF
THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the "Committee") of the board of directors of the Corporation (the "Board of Directors"), in accordance with the resolutions of the Board of Directors dated September 16, 2005 and September 29, 2006, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, by unanimous written consent dated May 14, 2007, adopted the following resolution creating a series of 17,500.1 shares of Preferred Stock of the Corporation designated as "Perpetual Non-Cumulative Preferred Stock, Series E".

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated September 16, 2005 and September 29, 2006, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is "Perpetual Non-Cumulative Preferred Stock, Series E" ("Series E"). Each share of Series E shall be identical in all respects to every other share of Series E.

Section 2. Number of Shares. The authorized number of shares of Series E shall be 17,500.1. Shares of Series E that are redeemed, purchased or otherwise acquired by the Corporation, or converted into another series of Preferred Stock, shall be cancelled and shall revert to authorized but unissued shares of Series E.

Section 3. Definitions. As used herein with respect to Series E:

- (a) "Board of Directors" means the board of directors of the Corporation.

(b) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(c) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(d) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series E is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(e) “Certificate of Designations” means this Certificate of Designations relating to the Series E, as it may be amended from time to time.

(f) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(g) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(h) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series E) that ranks junior to Series E either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(i) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(j) “Parity Stock” means any class or series of stock of the Corporation (other than Series E) that ranks equally with Series E both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(k) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series E.

(l) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(m) “Reuters Screen LIBOR01” means the display designated on the Reuters 3000 Xtra (or such other page as may replace that page on that service or such other service as may be nominated by the British Bankers’ Association for the purpose of displaying London interbank offered rates for U.S. Dollar deposits).

(n) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 8(b) below) or any other matter as to which the holders of Series E are entitled to vote as specified in Section 8 of this Certificate of Designations, any and all series of Preferred Stock (other than Series E) that rank equally with Series E either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series E shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$100,000 per share of Series E. Such dividends shall be payable in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), (a) if the shares of Series E are issued prior to June 1, 2012 (or if such date is not a Business Day, the next Business Day), on June 1 and December 1 of each year until June 1, 2012, and (b) thereafter, on March 1, June 1, September 1 and December 1 of each year (each a “Dividend Payment Date”); *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series E on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day. If a Dividend Payment Date prior to June 1, 2012 is not a Business Day, the applicable dividend shall be paid on the first Business Day following that day without adjustment. Dividends on Series E shall not be cumulative; holders of Series E shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends that are payable on Series E on any Dividend Payment Date will be payable to holders of record of Series E as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series E) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series E in respect of a Dividend Period shall be computed by the Calculation Agent (i) if shares of Series E are issued prior to June 1, 2012, on the basis of a 360-day year consisting of twelve-30 day months until the Dividend Payment Date in June 2012 and (ii) thereafter, on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series E, for each Dividend Period, shall be (a) if the shares of Series E are issued prior to June 1, 2012, a rate per annum equal to 5.793% until the Dividend Payment date in June 2012, and (b) thereafter, a rate per annum that will reset quarterly and shall be equal to the greater of (i) three-month LIBOR for such Dividend Period plus 0.7675% and (ii) 4.000%. Three-month LIBOR, with respect to any Dividend Period, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters Screen LIBOR01 (or any successor or replacement page) as of 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on Reuters Screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M. New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If fewer than three banks selected by the Calculation Agent are quoting as described in the preceding paragraph, LIBOR for such Dividend Period shall be LIBOR in effect for the prior Dividend Period.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices and will be available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series E shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series E as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series E remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series E have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series E and any shares of Parity Stock, all dividends declared on the Series E and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series E and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series E shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series E shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series E as to such distribution, in full an amount equal to \$100,000 per share (the "Series E Liquidation Amount"), together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series E and all holders of any stock of the Corporation ranking equally with the Series E as to such distribution, the amounts paid to the holders of Series E and to the holders of all such other stock shall be paid pro rata in accordance with the respective aggregate Liquidation Preferences of the holders of Series E and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series E and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series E, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series E receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series E may not be redeemed by the Corporation prior to the later of June 1, 2012 and the date of original issue of Series E. On or after that date, the Corporation, at its option, may redeem, in whole at any time or in part

from time to time, the shares of Series E at the time outstanding, upon notice given as provided in Section 6(c) below, at a redemption price equal to \$100,000 per share, together (except as otherwise provided herein) with an amount equal to any dividends that have been declared but not paid prior to the redemption date (but with no amount in respect of any dividends that have not been declared prior to such date). The redemption price for any shares of Series E shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above.

(b) **No Sinking Fund.** The Series E will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series E will have no right to require redemption of any shares of Series E.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series E shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series E designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series E. Notwithstanding the foregoing, if the Series E or any depositary shares representing interests in the Series E are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series E at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series E to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series E at the time outstanding, the shares to be redeemed shall be selected either pro rata or in such other manner as the Corporation may determine to be fair and equitable. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series E shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds

necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the pro rata benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Conversion Upon Regulatory Changes. If both (i) and (ii) below occur:

(i) after the date of the issuance of the Series E, the Corporation (by election or otherwise) becomes subject to any law, rule, regulation or guidance (together, "Regulations") relating to its capital adequacy, which Regulation (x) modifies the existing requirements for treatment as Allowable Capital (as defined under the Securities and Exchange Commission rules relating to consolidated supervised entities as in effect from time to time), (y) provides for a type or level of capital characterized as "Tier 1" or its equivalent pursuant to Regulations of any governmental agency, authority or other body having regulatory jurisdiction over the Corporation (or any of its subsidiaries or consolidated affiliates) and implementing the capital standards published by the Basel Committee on Banking Supervision, the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System or any other United States national governmental agency, authority or other body, or any other applicable regime based on capital standards published by the Basel Committee on Banking Supervision or its successor, or (z) provides for a type or level of capital that in the judgment of the Corporation (after consultation with legal counsel of recognized standing) is substantially equivalent to such "Tier 1" capital (such capital described in either (y) or (z) above is referred to below as "Tier 1 Capital Equivalent"), and

(ii) the Corporation affirmatively elects to qualify the Series E for treatment as Allowable Capital or Tier 1 Capital Equivalent without any sublimit or other quantitative restriction on the inclusion of the Series E in Allowable Capital or Tier 1 Capital Equivalent (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) under such Regulations,

then, upon such affirmative election, the Series E shall be convertible at the Corporation's option into a new series of Preferred Stock having terms and provisions substantially identical to those of the Series E, except that such new series may have such additional or modified rights, preferences, privileges and voting powers, and limitations and restrictions

thereof, as are necessary in the judgment of the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) (after consultation with legal counsel of recognized standing) to comply with the Required Unrestricted Capital Provisions (as defined below), *provided* that the Corporation will not cause any such conversion unless the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) determines that the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of such new series of Preferred Stock, taken as a whole, are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of the Series E, taken as a whole.

As used above, the term “Required Unrestricted Capital Provisions” means such terms and provisions as are, in the judgment of the Corporation (after consultation with counsel of recognized standing), required for preferred stock to be treated as Allowable Capital or Tier 1 Capital Equivalent, as applicable, without any sublimit or other quantitative restriction on the inclusion of such preferred stock in Allowable Capital or Tier 1 Capital Equivalent, as applicable (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) pursuant to the applicable Regulations.

The Corporation shall provide notice to the holders of Series E of any election to qualify the Series E for Allowable Capital or Tier 1 Capital Equivalent treatment and of any determination to convert the Series E into a new series of Preferred Stock pursuant to the terms of this Section 7, promptly upon the effectiveness of any such election or determination. A copy of such notice and of the relevant Regulations shall be maintained on file at the principal offices of the Corporation and, upon request, will be made available to any stockholder of the Corporation. Any conversion of the Series E pursuant to this Section 7 shall be effected pursuant to such procedures as the Corporation may determine and publicly disclose.

Except as specified in this Section 7, holders of Series E shares shall have no right to exchange or convert such shares into any other securities.

Section 8. Voting Rights.

(a) **General.** The holders of Series E shall not have any voting rights except as set forth below or as otherwise from to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series E shall not have been declared and paid for Dividend Periods, whether or not consecutive, equivalent to at least eighteen months (a “Nonpayment Event”), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series E, together with the holders of any outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the “Preferred Stock Directors”), *provided* that it shall be a qualification for election for any such Preferred Stock Director that the election of such director shall not cause the Corporation to violate

the corporate governance requirement of the New York Stock Exchange (or any other securities exchange or other trading facility on which securities of the Corporation may then be listed or traded) that listed or traded companies must have a majority of independent directors and *provided further* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series E, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series E or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series E or Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 10 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series E for Dividend Periods, whether or not consecutive, equivalent to at least one year after a Nonpayment Event, then the right of the holders of Series E to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series E and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of the outstanding shares of the Series E and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of the outstanding shares of the Series E and all Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at

such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series E are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series E and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series E with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series E.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series E, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series E, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series E remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series E immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 8(c), any increase in the amount of the authorized or issued Series E or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series E with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will

not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series E. In addition, any conversion of the Series E pursuant to Section 7 above shall not be deemed to adversely affect the rights, preferences, privileges and voting powers of the Series E.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 8(c) would adversely affect the Series E and one or more but not all other series of Preferred Stock, then only the Series E and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series E, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series E, the Corporation may amend, alter, supplement or repeal any terms of the Series E:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series E that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series E shall be required pursuant to Section 8(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series E shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series E (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the Bylaws, applicable law and any national securities exchange or other trading facility on which the Series E is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series E and any Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series E are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 9. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series E may deem and treat

the record holder of any share of Series E as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 10. Notices. All notices or communications in respect of Series E shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or Bylaws or by applicable law.

Section 11. No Preemptive Rights. No share of Series E shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 12. Other Rights. The shares of Series E shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS
OF
PERPETUAL NON-CUMULATIVE PREFERRED STOCK, SERIES F
OF
THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the "Committee") of the board of directors of the Corporation (the "Board of Directors"), in accordance with the resolutions of the Board of Directors dated September 16, 2005 and September 29, 2006, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, by unanimous written consent dated May 14, 2007, adopted the following resolution creating a series of 5,000.1 shares of Preferred Stock of the Corporation designated as "Perpetual Non-Cumulative Preferred Stock, Series F".

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated September 16, 2005 and September 29, 2006, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is "Perpetual Non-Cumulative Preferred Stock, Series F" ("Series F"). Each share of Series F shall be identical in all respects to every other share of Series F.

Section 2. Number of Shares. The authorized number of shares of Series F shall be 5,000.1. Shares of Series F that are redeemed, purchased or otherwise acquired by the Corporation, or converted into another series of Preferred Stock, shall be cancelled and shall revert to authorized but unissued shares of Series F.

Section 3. Definitions. As used herein with respect to Series F:

- (a) "Board of Directors" means the board of directors of the Corporation.

(b) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(c) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(d) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series F is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(e) “Certificate of Designations” means this Certificate of Designations relating to the Series F, as it may be amended from time to time.

(f) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(g) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(h) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series F) that ranks junior to Series F either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(i) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(j) “Parity Stock” means any class or series of stock of the Corporation (other than Series F) that ranks equally with Series F both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(k) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series F.

(l) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(m) “Reuters Screen LIBOR01” means the display designated on the Reuters 3000 Xtra (or such other page as may replace that page on that service or such other service as may be nominated by the British Bankers’ Association for the purpose of displaying London interbank offered rates for U.S. Dollar deposits).

(n) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 8(b) below) or any other matter as to which the holders of Series F are entitled to vote as specified in Section 8 of this Certificate of Designations, any and all series of Preferred Stock (other than Series F) that rank equally with Series F either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series F shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$100,000 per share of Series F. Such dividends shall be payable quarterly in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on March 1, June 1, September 1 and December 1 of each year (each a “Dividend Payment Date”); *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series F on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day. If a Dividend Payment Date is not a Business Day, the applicable dividend shall be paid on the first Business Day following that day. Dividends on Series F shall not be cumulative; holders of Series F shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends that are payable on Series F on any Dividend Payment Date will be payable to holders of record of Series F as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence

on and include the date of original issue of the Series F) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series F in respect of any Dividend Period shall be computed by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series F, for each Dividend Period, shall be (a) if the shares of Series F are issued prior to September 1, 2012, a rate per annum equal to three-month LIBOR plus 0.77% until the Dividend Payment date in September 2012, and (b) thereafter, a rate per annum that will reset quarterly and shall be equal to the greater of (i) three-month LIBOR for such Dividend Period plus 0.77 % and (ii) 4.000%. Three-month LIBOR, with respect to any Dividend Period, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters Screen LIBOR01 (or any successor or replacement page) as of 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on Reuters Screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M. New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If fewer than three banks selected by the Calculation Agent are quoting as described in the preceding paragraph, LIBOR for such Dividend Period shall be LIBOR in effect for the prior Dividend Period.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices and will be available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series F shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series F as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series F remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series F have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series F and any shares of Parity Stock, all dividends declared on the Series F and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series F and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series F shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series F shall be entitled to receive, out of the assets of the

Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series F as to such distribution, in full an amount equal to \$100,000 per share (the "Series F Liquidation Amount"), together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series F and all holders of any stock of the Corporation ranking equally with the Series F as to such distribution, the amounts paid to the holders of Series F and to the holders of all such other stock shall be paid pro rata in accordance with the respective aggregate Liquidation Preferences of the holders of Series F and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series F and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series F, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series F receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series F may not be redeemed by the Corporation prior to the later of September 1, 2012 and the date of original issue of Series F. On or after that date, the Corporation, at its option, may redeem, in whole at any time or in part from time to time, the shares of Series F at the time outstanding, upon notice given as provided in Section 6(c) below, at a redemption price equal to \$100,000 per share, together (except as otherwise provided herein) with an amount equal to any dividends that have been declared but not paid prior to the redemption date (but with no amount in respect

of any dividends that have not been declared prior to such date). The redemption price for any shares of Series F shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above.

(b) **No Sinking Fund.** The Series F will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series F will have no right to require redemption of any shares of Series F.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series F shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series F designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series F. Notwithstanding the foregoing, if the Series F or any depositary shares representing interests in the Series F are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series F at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series F to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series F at the time outstanding, the shares to be redeemed shall be selected either pro rata or in such other manner as the Corporation may determine to be fair and equitable. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series F shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the pro rata benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that

any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Conversion Upon Regulatory Changes. If both (i) and (ii) below occur:

(i) after the date of the issuance of the Series F, the Corporation (by election or otherwise) becomes subject to any law, rule, regulation or guidance (together, "Regulations") relating to its capital adequacy, which Regulation (x) modifies the existing requirements for treatment as Allowable Capital (as defined under the Securities and Exchange Commission rules relating to consolidated supervised entities as in effect from time to time), (y) provides for a type or level of capital characterized as "Tier 1" or its equivalent pursuant to Regulations of any governmental agency, authority or other body having regulatory jurisdiction over the Corporation (or any of its subsidiaries or consolidated affiliates) and implementing the capital standards published by the Basel Committee on Banking Supervision, the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System or any other United States national governmental agency, authority or other body, or any other applicable regime based on capital standards published by the Basel Committee on Banking Supervision or its successor, or (z) provides for a type or level of capital that in the judgment of the Corporation (after consultation with legal counsel of recognized standing) is substantially equivalent to such "Tier 1" capital (such capital described in either (y) or (z) above is referred to below as "Tier 1 Capital Equivalent"), and

(ii) the Corporation affirmatively elects to qualify the Series F for treatment as Allowable Capital or Tier 1 Capital Equivalent without any sublimit or other quantitative restriction on the inclusion of the Series F in Allowable Capital or Tier 1 Capital Equivalent (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) under such Regulations,

then, upon such affirmative election, the Series F shall be convertible at the Corporation's option into a new series of Preferred Stock having terms and provisions substantially identical to those of the Series F, except that such new series may have such additional or modified rights, preferences, privileges and voting powers, and limitations and restrictions thereof, as are necessary in the judgment of the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) (after consultation with legal

counsel of recognized standing) to comply with the Required Unrestricted Capital Provisions (as defined below), *provided* that the Corporation will not cause any such conversion unless the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) determines that the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of such new series of Preferred Stock, taken as a whole, are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and the qualifications, limitations and restrictions thereof, of the Series F, taken as a whole.

As used above, the term “Required Unrestricted Capital Provisions” means such terms and provisions as are, in the judgment of the Corporation (after consultation with counsel of recognized standing), required for preferred stock to be treated as Allowable Capital or Tier 1 Capital Equivalent, as applicable, without any sublimit or other quantitative restriction on the inclusion of such preferred stock in Allowable Capital or Tier 1 Capital Equivalent, as applicable (other than any limitation the Corporation elects to accept and any limitation requiring that common equity or a specified form of common equity constitute the dominant form of Allowable Capital or Tier 1 Capital Equivalent) pursuant to the applicable Regulations.

The Corporation shall provide notice to the holders of Series F of any election to qualify the Series F for Allowable Capital or Tier 1 Capital Equivalent treatment and of any determination to convert the Series F into a new series of Preferred Stock pursuant to the terms of this Section 7, promptly upon the effectiveness of any such election or determination. A copy of such notice and of the relevant Regulations shall be maintained on file at the principal offices of the Corporation and, upon request, will be made available to any stockholder of the Corporation. Any conversion of the Series F pursuant to this Section 7 shall be effected pursuant to such procedures as the Corporation may determine and publicly disclose.

Except as specified in this Section 7, holders of Series F shares shall have no right to exchange or convert such shares into any other securities.

Section 8. Voting Rights.

(a) **General.** The holders of Series F shall not have any voting rights except as set forth below or as otherwise from to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series F shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a “Nonpayment Event”), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series F, together with the holders of any outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the “Preferred Stock Directors”), *provided* that it shall be a qualification for election for any such Preferred Stock Director that the election of such director shall not cause the Corporation to violate the corporate governance requirement of the New York Stock Exchange (or any other securities exchange or other trading facility on

which securities of the Corporation may then be listed or traded) that listed or traded companies must have a majority of independent directors and *provided further* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series F, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series F or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series F or Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 10 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series F for at least four Dividend Periods (whether or not consecutive) after a Nonpayment Event, then the right of the holders of Series F to elect the Preferred Stock Directors shall cease (but subject always to re-vesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series F and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of the outstanding shares of the Series F and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of the outstanding shares of the Series F and all Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall

each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series F are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series F and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series F with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series F.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series F, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series F, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series F remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series F immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 8(c), any increase in the amount of the authorized or issued Series F or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series F with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will

not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series F. In addition, any conversion of the Series F pursuant to Section 7 above shall not be deemed to adversely affect the rights, preferences, privileges and voting powers of the Series F.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 8(c) would adversely affect the Series F and one or more but not all other series of Preferred Stock, then only the Series F and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series F, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series F, the Corporation may amend, alter, supplement or repeal any terms of the Series F:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series F that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series F shall be required pursuant to Section 8(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series F shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series F (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the Bylaws, applicable law and any national securities exchange or other trading facility on which the Series F is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series F and any Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series F are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 9. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series F may deem and treat the record holder of any share of Series F as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 10. Notices. All notices or communications in respect of Series F shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or Bylaws or by applicable law.

Section 11. No Preemptive Rights. No share of Series F shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 12. Other Rights. The shares of Series F shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**5.50% FIXED-TO-FLOATING RATE NON-CUMULATIVE
PREFERRED STOCK, SERIES J**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, at a meeting duly called and held on April 22, 2013, adopted the following resolution creating a series of 46,000 shares of Preferred Stock of the Corporation designated as “5.50% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series J”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “5.50% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series J” (“Series J”). Each share of Series J shall be identical in all respects to every other share of Series J, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series J shall be 46,000. Shares of Series J that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series J.

Section 3. Definitions. As used herein with respect to Series J:

(a) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(b) “Board of Directors” means the board of directors of the Corporation.

(c) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(d) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(e) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series J is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(f) “Certificate of Designations” means this Certificate of Designations relating to the Series J, as it may be amended from time to time.

(g) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(h) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(i) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series J) that ranks junior to Series J either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(j) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series J) that ranks equally with Series J both in the payment of

dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series J.

(m) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of the Series J (ii) any proposed change in those laws or regulations that is announced or becomes effective after the initial issuance of any share of Series J, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws or regulations that is announced after the initial issuance of any share of Series J, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series J then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series J is outstanding.

(n) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(o) “Reuters screen” means the display on the Reuters 3000 Xtra service, or any successor or replacement service.

(p) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series J are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series J) that rank equally with Series J either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) Rate. Holders of Series J shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series J. Such dividends shall be payable quarterly in arrears (as provided below in

this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on February 10, May 10, August 10 and November 10 (“Dividend Payment Dates”), commencing on August 10, 2013; *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series J on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day unless, after May 10, 2023, such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such Dividend shall instead be payable on) the immediately preceding Business Day. Dividends on Series J shall not be cumulative; holders of Series J shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series J shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series J on any Dividend Payment Date will be payable to holders of record of Series J as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series J, *provided* that, for any share of Series J issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series J in respect of any Dividend Period beginning prior to May 10, 2023 shall be calculated on the basis of a 360-day year consisting of twelve 30-day months, and dividends payable on the Series J in respect of any Dividend Period beginning on or after May 10, 2023 shall be calculated by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series J, for each Dividend Period beginning prior to May 10, 2023, shall be a rate per annum equal to 5.50%, and the dividend rate on the Series J, for each Dividend Period beginning on or after May 10, 2023, shall be a rate per annum equal to LIBOR (as defined below) for such Dividend Period plus 3.64%. LIBOR, with respect to any Dividend Period beginning on or after May 10, 2023, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters screen LIBOR01 (or any successor or replacement page) as of approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on the Reuters screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M., New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If no quotation is provided as described in the preceding paragraph, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate LIBOR or any of the foregoing lending rates, shall determine LIBOR for such Dividend Period in its sole discretion.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series J shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series J as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) Priority of Dividends. So long as any share of Series J remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series J have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series J and any shares of Parity Stock, all dividends declared on the Series J and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series J and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series J shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) Voluntary or Involuntary Liquidation. In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series J shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series J as to such distribution, in full an amount equal to \$25,000 per

share (the “Series J Liquidation Amount”), together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) Partial Payment. If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series J and all holders of any stock of the Corporation ranking equally with the Series J as to such distribution, the amounts paid to the holders of Series J and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series J and the holders of all such other stock. In any such distribution, the “Liquidation Preference” of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series J and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) Residual Distributions. If the Liquidation Preference has been paid in full to all holders of Series J, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) Merger, Consolidation and Sale of Assets Not Liquidation. For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series J receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) Optional Redemption. The Series J is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series J at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after May 10, 2023, or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price equal to \$25,000 per share, together (except as otherwise provided hereinbelow) with an amount equal to any dividends that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series J shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend

Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series J without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital guidelines applicable to the Corporation.

(b) No Sinking Fund. The Series J will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series J will have no right to require redemption of any shares of Series J.

(c) Notice of Redemption. Notice of every redemption of shares of Series J shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series J designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series J. Notwithstanding the foregoing, if the Series J or any depository shares representing interests in the Series J are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series J at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series J to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) Partial Redemption. In case of any redemption of only part of the shares of Series J at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or in such other manner as the Corporation may determine to be fair and equitable. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series J shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) Effectiveness of Redemption. If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for

cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) General. The holders of Series J shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) Right To Elect Two Directors Upon Nonpayment Events. If and whenever dividends on any shares of Series J shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series J, together with the holders of any outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series J, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series J or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series J or Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series J for four consecutive Dividend Periods after a Nonpayment Event, then the right of the holders of Series J to elect the Preferred Stock Directors shall cease (but subject always to reversion of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series J and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms

of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of the outstanding shares of the Series J and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of the outstanding shares of the Series J and all Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) Other Voting Rights. So long as any shares of Series J are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series J and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) Authorization of Senior Stock. Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series J with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) Amendment of Series J. Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series J, taken as a whole; or

(iii) Share Exchanges, Reclassifications, Mergers and Consolidations. Any consummation of a binding share exchange or

reclassification involving the Series J, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series J remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series J immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series J or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series J with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series J.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series J and one or more but not all other series of Preferred Stock, then only the Series J and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) Changes for Clarification. Without the consent of the holders of the Series J, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series J, the Corporation may amend, alter, supplement or repeal any terms of the Series J:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series J that is not inconsistent with the provisions of this Certificate of Designations.

(e) Changes after Provision for Redemption. No vote or consent of the holders of Series J shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series J shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) Procedures for Voting and Consents. The rules and procedures for calling and conducting any meeting of the holders of Series J (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the Bylaws, applicable law and any national securities exchange or other trading facility on which the Series J is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series J and any Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series J are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series J may deem and treat the record holder of any share of Series J as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series J shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or Bylaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series J shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series J shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**6.375% FIXED-TO-FLOATING RATE NON-CUMULATIVE
PREFERRED STOCK, SERIES K**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, at a meeting duly called and held on April 24, 2014, adopted the following resolution creating a series of 32,200 shares of Preferred Stock of the Corporation designated as “6.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “6.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series K” (“Series K”). Each share of Series K shall be identical in all respects to every other share of Series K, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series K shall be 32,200. Shares of Series K that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series K.

Section 3. Definitions. As used herein with respect to Series K:

(a) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(b) “Board of Directors” means the board of directors of the Corporation.

(c) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(d) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

(e) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series K is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(f) “Certificate of Designations” means this Certificate of Designations relating to the Series K, as it may be amended from time to time.

(g) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(h) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(i) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series K) that ranks junior to Series K either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(j) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series K) that ranks equally with Series K both in the payment of

dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series K.

(m) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series K, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the initial issuance of any share of Series K, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series K, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series K then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series K is outstanding.

(n) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(o) “Reuters screen” means the display on the Reuters 3000 Xtra service, or any successor or replacement service.

(p) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series K are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series K) that rank equally with Series K either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) Rate. Holders of Series K shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends per each share of Series K at the rate determined as set forth below in this Section (4) applied to the liquidation

preference amount of \$25,000 per share of Series K. Such dividends shall be payable quarterly in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on February 10, May 10, August 10 and November 10 (“Dividend Payment Dates”), commencing on August 10, 2014; *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such Dividend Payment Date shall instead be (and any dividend payable on Series K on such Dividend Payment Date shall instead be payable on) the immediately succeeding Business Day unless, after May 10, 2024, such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such Dividend shall instead be payable on) the immediately preceding Business Day. Dividends on Series K shall not be cumulative; holders of Series K shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series K shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series K on any Dividend Payment Date will be payable to holders of record of Series K as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series K, *provided* that, for any share of Series K issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series K in respect of any Dividend Period beginning prior to May 10, 2024 shall be calculated on the basis of a 360-day year consisting of twelve 30-day months, and dividends payable on the Series K in respect of any Dividend Period beginning on or after May 10, 2024 shall be calculated by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series K, for each Dividend Period beginning prior to May 10, 2024, shall be a rate per annum equal to 6.375%, and the dividend rate on the Series K, for each Dividend Period beginning on or after May 10, 2024, shall be a rate per annum equal to LIBOR (as defined below) for such Dividend Period plus 3.55%. LIBOR, with respect to any Dividend Period beginning on or after May 10, 2024, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters screen LIBOR01 (or any successor or replacement page) as of approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on the Reuters screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M., New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If no quotation is provided as described in the preceding paragraph, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate LIBOR or any of the foregoing lending rates, shall determine LIBOR for such Dividend Period in its sole discretion.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series K shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series K as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) Priority of Dividends. So long as any share of Series K remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series K have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series K and any shares of Parity Stock, all dividends declared on the Series K and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared *pro rata* so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series K and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series K shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) Voluntary or Involuntary Liquidation. In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series K shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series K as to such distribution, in full an amount equal to \$25,000 per

share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) Partial Payment. If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series K and all holders of any stock of the Corporation ranking equally with the Series K as to such distribution, the amounts paid to the holders of Series K and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series K and the holders of all such other stock. In any such distribution, the “Liquidation Preference” of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series K and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) Residual Distributions. If the Liquidation Preference has been paid in full to all holders of Series K, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) Merger, Consolidation and Sale of Assets Not Liquidation. For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series K receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) Optional Redemption. The Series K is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series K at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after May 10, 2024 (or, if not a Business Day, the next succeeding Business Day), or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided hereinbelow) an amount equal to any dividends per share that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series K shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a

Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series K without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital guidelines applicable to the Corporation.

(b) No Sinking Fund. The Series K will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series K will have no right to require redemption of any shares of Series K.

(c) Notice of Redemption. Notice of every redemption of shares of Series K shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series K designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series K. Notwithstanding the foregoing, if the Series K or any depository shares representing interests in the Series K are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series K at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series K to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) Partial Redemption. In case of any redemption of only part of the shares of Series K at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series K shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) Effectiveness of Redemption. If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed

outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) General. The holders of Series K shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) Right To Elect Two Directors Upon Nonpayment Events. If and whenever dividends on any shares of Series K shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series K, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series K, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series K or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series K or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series K for four consecutive Dividend Periods after a Nonpayment Event, then the right of the holders of Series K to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series K and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series K and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series K and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) Other Voting Rights. So long as any shares of Series K are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least $66\frac{2}{3}\%$ of the shares of Series K and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) Authorization of Senior Stock. Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series K with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) Amendment of Series K. Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series K, taken as a whole; or

(iii) Share Exchanges, Reclassifications, Mergers and Consolidations. Any consummation of a binding share exchange or reclassification involving the Series K, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series K remain outstanding or, in the case of any such merger or

consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series K immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series K or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series K with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series K.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series K and one or more but not all other series of Preferred Stock, then only the Series K and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) Changes for Clarification. Without the consent of the holders of the Series K, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series K, the Corporation may amend, alter, supplement or repeal any terms of the Series K:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series K that is not inconsistent with the provisions of this Certificate of Designations.

(e) Changes after Provision for Redemption. No vote or consent of the holders of Series K shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series K shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) Procedures for Voting and Consents. The rules and procedures for calling and conducting any meeting of the holders of Series K (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of

proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series K is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series K and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series K are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series K may deem and treat the record holder of any share of Series K as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series K shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series K shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series K shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**5.70% FIXED-TO-FLOATING RATE NON-CUMULATIVE
PREFERRED STOCK, SERIES L**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, at a meeting duly called and held on April 24, 2014, adopted the following resolution creating a series of 52,000 shares of Preferred Stock of the Corporation designated as “5.70% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series L”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “5.70% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series L” (“Series L”). Each share of Series L shall be identical in all respects to every other share of Series L, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series L shall be 52,000. Shares of Series L that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series L.

Section 3. Definitions. As used herein with respect to Series L:

(a) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(b) “Board of Directors” means the board of directors of the Corporation.

(c) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(d) “Business Day” means (i) from the original issue date to and including May 10, 2019 (or, if such day is not a Monday, Tuesday, Wednesday, Thursday or Friday or is a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, the next day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close), a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, and (ii) thereafter, a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close and is a London Business Day.

(e) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series L is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(f) “Certificate of Designations” means this Certificate of Designations relating to the Series L, as it may be amended from time to time.

(g) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(h) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(i) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series L) that ranks junior to Series L

either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(j) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series L) that ranks equally with Series L both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series L.

(m) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series L, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the initial issuance of any share of Series L, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series L, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series L then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series L is outstanding.

(n) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(o) “Reuters screen” means the display on the Reuters 3000 Xtra service, or any successor or replacement service.

(p) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series L are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series L) that rank equally with Series L either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding

up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) Rate. Holders of Series L shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends per each share of Series L at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series L. Such dividends shall be payable in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on the 10th day of May and November of each year, commencing on November 10, 2014 and ending on May 10, 2019, and on the 10th day of February, May, August and November of each year following May 10, 2019 (“Dividend Payment Dates”), commencing on November 10, 2014; *provided* that if any such Dividend Payment Date that would otherwise occur on or before May 10, 2019 is a day that is not a Business Day, such dividend shall instead be payable on the immediately succeeding Business Day without interest or other payment in respect of such delayed payment, *and provided further*, if any such Dividend Payment Date that would otherwise occur for any Dividend Period after the Dividend Period ending on but excluding May 10, 2019 is a day that is not a Business Day, such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately succeeding Business Day unless such succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately preceding Business Day. Dividends on Series L shall not be cumulative; holders of Series L shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series L shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series L on any Dividend Payment Date will be payable to holders of record of Series L as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series L, *provided* that, for any share of Series L issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series L in respect of any Dividend Period beginning prior to May 10, 2019 shall be calculated on the basis of a 360-day year consisting of twelve 30-day months, and dividends payable on the Series L in respect of any Dividend Period beginning on or after May 10, 2019 shall be calculated by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series L, for each Dividend Period beginning prior to May 10, 2019, shall be a rate per annum equal to 5.70%, and the dividend rate on the Series L, for each Dividend Period beginning on or after May 10, 2019, shall be a rate per annum equal to LIBOR (as defined below) for such Dividend Period plus 3.884%. LIBOR, with respect to any Dividend Period beginning on or after May 10, 2019, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters screen LIBOR01 (or any successor or replacement page) as of approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on the Reuters screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M., New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by three major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If no quotation is provided as described in the preceding paragraph, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate LIBOR or any of the foregoing lending rates, shall determine LIBOR for such Dividend Period in its sole discretion.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series L shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series L as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) Priority of Dividends. So long as any share of Series L remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series L have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series L and any shares of Parity Stock, all dividends declared on the Series L and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared *pro rata* so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series L and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series L shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) Voluntary or Involuntary Liquidation. In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series L shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series L as to such distribution, in full an amount equal to \$25,000 per share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) Partial Payment. If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series L and all holders of any stock of the Corporation ranking equally with the Series L as to such distribution, the amounts paid to the holders of Series L and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series L and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series L and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) Residual Distributions. If the Liquidation Preference has been paid in full to all holders of Series L, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) Merger, Consolidation and Sale of Assets Not Liquidation. For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series L receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of

the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) Optional Redemption. The Series L is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series L at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after May 10, 2019 (or, if not a Business Day, the next succeeding Business Day), or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided hereinbelow) an amount equal to any dividends per share that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series L shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series L without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital guidelines applicable to the Corporation.

(b) No Sinking Fund. The Series L will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series L will have no right to require redemption of any shares of Series L.

(c) Notice of Redemption. Notice of every redemption of shares of Series L shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series L designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series L. Notwithstanding the foregoing, if the Series L or any depositary shares representing interests in the Series L are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series L at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series L to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4)

the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) Partial Redemption. In case of any redemption of only part of the shares of Series L at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series L shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) Effectiveness of Redemption. If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) General. The holders of Series L shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) Right To Elect Two Directors Upon Nonpayment Events. If and whenever dividends on any shares of Series L shall not have been declared and paid for any Dividend Periods that, in aggregate, equal at least 18 months, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series L, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series L, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the

holders of record of at least 20% of the Series L or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series L or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series L for consecutive Dividend Periods that, in aggregate, equal at least one year after a Nonpayment Event, then the right of the holders of Series L to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series L and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series L and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series L and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) Other Voting Rights. So long as any shares of Series L are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series L and any Voting Preferred Stock at the time outstanding and entitled to

vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) Authorization of Senior Stock. Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series L with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) Amendment of Series L. Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series L, taken as a whole; or

(iii) Share Exchanges, Reclassifications, Mergers and Consolidations. Any consummation of a binding share exchange or reclassification involving the Series L, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series L remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series L immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series L or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series L with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series L.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series L and one or more but not all other series of Preferred Stock, then only the Series L and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) Changes for Clarification. Without the consent of the holders of the Series L, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series L, the Corporation may amend, alter, supplement or repeal any terms of the Series L:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series L that is not inconsistent with the provisions of this Certificate of Designations.

(e) Changes after Provision for Redemption. No vote or consent of the holders of Series L shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series L shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) Procedures for Voting and Consents. The rules and procedures for calling and conducting any meeting of the holders of Series L (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series L is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series L and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series L are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series L may deem and treat the record holder of any share of Series L as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series L shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series L shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series L shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**5.375% FIXED-TO-FLOATING RATE NON-CUMULATIVE
PREFERRED STOCK, SERIES M**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, at a meeting duly called and held on April 17, 2015, adopted the following resolution creating a series of 80,000 shares of Preferred Stock of the Corporation designated as “5.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series M”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “5.375% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series M” (“Series M”). Each share of Series M shall be identical in all respects to every other share of Series M, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series M shall be 80,000. Shares of Series M that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series M.

Section 3. Definitions. As used herein with respect to Series M:

(a) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(b) “Board of Directors” means the board of directors of the Corporation.

(c) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(d) “Business Day” means (i) from the original issue date to and including May 10, 2020 (or, if such day is not a Monday, Tuesday, Wednesday, Thursday or Friday or is a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, the next day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close), a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, and (ii) thereafter, a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close and is a London Business Day.

(e) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series M is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(f) “Certificate of Designations” means this Certificate of Designations relating to the Series M, as it may be amended from time to time.

(g) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(h) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(i) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series M) that ranks junior to Series

M either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(j) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in London generally are authorized or obligated by law, regulation or executive order to close and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series M) that ranks equally with Series M both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series M.

(m) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series M, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the initial issuance of any share of Series M, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series M, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series M then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series M is outstanding.

(n) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(o) “Reuters screen” means the display on the Reuters 3000 Xtra service, or any successor or replacement service.

(p) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series M are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series M) that rank equally with Series M either as to the payment of

dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series M shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends per each share of Series M at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series M. Such dividends shall be payable in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on the 10th day of May and November of each year, commencing on November 10, 2015 and ending on May 10, 2020, and on the 10th day of February, May, August and November of each year following May 10, 2020 (“Dividend Payment Dates”); *provided* that if any such Dividend Payment Date that occurs on or before May 10, 2020 is a day that is not a Business Day, such dividend shall instead be payable on the immediately succeeding Business Day without interest or other payment in respect of such delayed payment, *and provided further*, if any such Dividend Payment Date that would otherwise occur for any Dividend Period after the Dividend Period ending on but excluding May 10, 2020 is a day that is not a Business Day, such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately succeeding Business Day unless such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately preceding Business Day. Dividends on Series M shall not be cumulative; holders of Series M shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series M shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series M on any Dividend Payment Date will be payable to holders of record of Series M as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series M, *provided* that, for any share of Series M issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series M in respect of any Dividend Period beginning prior to May 10, 2020 shall be calculated on the basis of a 360-day year consisting of twelve 30-day months, and dividends payable on the Series M in respect of any Dividend Period beginning on or after May 10, 2020 shall be calculated by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series M, for each Dividend Period beginning prior to May 10, 2020, shall be a rate per annum equal to 5.375%, and the dividend rate on the Series M, for each Dividend Period beginning on or after May 10, 2020, shall be a rate per annum equal to LIBOR (as defined below) for such Dividend Period plus 3.922%. LIBOR, with respect to any Dividend Period beginning on or after May 10, 2020, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters screen LIBOR01 (or any successor or replacement page) as of approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on the Reuters screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M., New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If no quotation is provided as described in the preceding paragraph, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate LIBOR or any of the foregoing lending rates, shall determine LIBOR for such Dividend Period in its sole discretion.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series M shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series M as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series M remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series M have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series M and any shares of Parity Stock, all dividends declared on the Series M and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of parity stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared *pro rata* so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series M and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series M shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series M shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series M as to such distribution, in full an amount equal to \$25,000 per share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series M and all holders of any stock of the Corporation ranking equally with the Series M as to such distribution, the amounts paid to the holders of Series M and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series M and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series M and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series M, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series M receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of

the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series M is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series M at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after May 10, 2020 (or, if not a Business Day, the next succeeding Business Day), or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided hereinbelow) an amount equal to any dividends per share that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series M shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series M without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital guidelines applicable to the Corporation.

(b) **No Sinking Fund.** The Series M will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series M will have no right to require redemption of any shares of Series M.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series M shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series M designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series M. Notwithstanding the foregoing, if the Series M or any depositary shares representing interests in the Series M are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series M at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series M to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4)

the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series M at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series M shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) **General.** The holders of Series M shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series M shall not have been declared and paid for any Dividend Periods that, in aggregate, equal at least 18 months, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series M, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series M, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the

holders of record of at least 20% of the Series M or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series M or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series M for consecutive Dividend Periods that, in aggregate, equal at least one year after a Nonpayment Event, then the right of the holders of Series M to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series M and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series M and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series M and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series M are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series M and any Voting Preferred Stock at the time outstanding and entitled to

vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series M with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series M.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series M, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series M, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series M remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series M immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series M or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series M with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series M.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series M and one or more but not all other series of Preferred Stock, then only the Series M and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series M, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series M, the Corporation may amend, alter, supplement or repeal any terms of the Series M:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series M that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series M shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series M shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series M (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series M is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series M and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series M are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series M may deem and treat the record holder of any share of Series M as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series M shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series M shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series M shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS
OF
6.30% NON-CUMULATIVE PREFERRED STOCK, SERIES N
OF
THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, at a meeting duly called and held on February 18, 2016, adopted the following resolution creating a series of 31,050 shares of Preferred Stock of the Corporation designated as “6.30% Non-Cumulative Preferred Stock, Series N”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “6.30% Non-Cumulative Preferred Stock, Series N” (“Series N”). Each share of Series N shall be identical in all respects to every other share of Series N, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series N shall be 31,050. Shares of Series N that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series N.

Section 3. Definitions. As used herein with respect to Series N:

(a) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(b) “Board of Directors” means the board of directors of the Corporation.

(c) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(d) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law, regulation or executive order to close.

(e) “Certificate of Designations” means this Certificate of Designations relating to the Series N, as it may be amended from time to time.

(f) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(g) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(h) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series N) that ranks junior to Series N either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(i) “Parity Stock” means any class or series of stock of the Corporation (other than Series N) that ranks equally with Series N both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(j) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series N.

(k) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series N, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the initial issuance of any share of Series N, or (iii) any official administrative decision or judicial

decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series N, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series N then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series N is outstanding.

(l) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series N are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series N) that rank equally with Series N either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series N shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends at the rate per annum equal to 6.30% applied to the liquidation preference amount of \$25,000 per share of Series N. Such dividends shall be payable quarterly in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on February 10, May 10, August 10 and November 10 (“Dividend Payment Dates”), commencing on May 10, 2016; *provided* that if any such Dividend Payment Date would otherwise occur on a day that is not a Business Day, such dividend shall instead be payable on the immediately succeeding Business Day, without interest or other payment in respect of such delayed payment. Dividends on Series N shall not be cumulative; holders of Series N shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series N shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series N on any Dividend Payment Date will be payable to holders of record of Series N as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a "Dividend Record Date"). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a "Dividend Period") shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series N, *provided* that, for any share of Series N issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series N in respect of any Dividend Period shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

Holders of Series N shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series N as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series N remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series N have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series N and any shares of Parity Stock, all dividends declared on the Series N and all such Parity Stock and payable

on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared pro rata so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series N and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series N shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series N shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series N as to such distribution, in full an amount equal to \$25,000 per share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series N and all holders of any stock of the Corporation ranking equally with the Series N as to such distribution, the amounts paid to the holders of Series N and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series N and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series N and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series N, the holders of other stock of the Corporation shall be

entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series N receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series N is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series N at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after May 10, 2021 (or, if not a Business Day, the next succeeding Business Day), or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided herein below) an amount equal to any dividends per share that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series N shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series N without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital guidelines applicable to the Corporation.

(b) **No Sinking Fund.** The Series N will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series N will have no right to require redemption of any shares of Series N.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series N shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series N designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series N.

Notwithstanding the foregoing, if the Series N or any depositary shares representing interests in the Series N are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series N at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series N to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series N at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series N shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) **General.** The holders of Series N shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series N shall not have been declared and paid for at least six Dividend Periods, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series N, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for

purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series N, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series N or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series N or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series N for four consecutive Dividend Periods after a Nonpayment Event, then the right of the holders of Series N to elect the Preferred Stock Directors shall cease (but subject always to re-vesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series N and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series N and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series N and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office

until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series N are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least $66\frac{2}{3}\%$ of the shares of Series N and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series N with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series N.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series N, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series N, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series N remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series N immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series N or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series N with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series N.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series N and one or more but not all other series of Preferred Stock, then only the Series N and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series N, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series N, the Corporation may amend, alter, supplement or repeal any terms of the Series N:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series N that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series N shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series N shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series N (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series N is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series N and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series N are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series N may deem and treat the record holder of any share of Series N as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series N shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series N shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series N shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**5.30% FIXED-TO-FLOATING RATE NON-CUMULATIVE
PREFERRED STOCK, SERIES O**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, at a meeting duly called and held on July 25, 2016, adopted the following resolution creating a series of 26,000 shares of Preferred Stock of the Corporation designated as “5.30% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series O”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “5.30% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series O” (“Series O”). Each share of Series O shall be identical in all respects to every other share of Series O, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series O shall be 26,000. Shares of Series O that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series O.

Section 3. Definitions. As used herein with respect to Series O:

(a) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(b) “Board of Directors” means the board of directors of the Corporation.

(c) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(d) “Business Day” means (i) from the original issue date to and including November 10, 2026 (or, if such day is not a Monday, Tuesday, Wednesday, Thursday or Friday or is a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, the next day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close), a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, and (ii) thereafter, a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close and is a London Business Day.

(e) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series O is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(f) “Certificate of Designations” means this Certificate of Designations relating to the Series O, as it may be amended from time to time.

(g) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(h) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(i) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series O) that ranks junior to Series O

either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(j) “London Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in London generally are authorized or obligated by law, regulation or executive order to close and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(k) “Parity Stock” means any class or series of stock of the Corporation (other than Series O) that ranks equally with Series O both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series O.

(m) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series O, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the initial issuance of any share of Series O, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series O, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series O then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series O is outstanding.

(n) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(o) “Reuters screen” means the display on the Reuters 3000 Xtra service, or any successor or replacement service.

(p) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series O are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series O) that rank equally with Series O either as to the payment of

dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series O shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends per each share of Series O at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series O. Such dividends shall be payable in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on the 10th day of May and November of each year, commencing on November 10, 2016 and ending on November 10, 2026, and on the 10th day of February, May, August and November of each year following November 10, 2026 (“Dividend Payment Dates”); *provided* that if any such Dividend Payment Date that occurs on or before November 10, 2026 is a day that is not a Business Day, such dividend shall instead be payable on the immediately succeeding Business Day without interest or other payment in respect of such delayed payment, *and provided further*, if any such Dividend Payment Date that would otherwise occur for any Dividend Period after the Dividend Period ending on but excluding November 10, 2026 is a day that is not a Business Day, such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately succeeding Business Day unless such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately preceding Business Day. Dividends on Series O shall not be cumulative; holders of Series O shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series O shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy guidelines of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy guidelines or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series O on any Dividend Payment Date will be payable to holders of record of Series O as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a

“Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a “Dividend Period”) shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series O, *provided* that, for any share of Series O issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series O in respect of any Dividend Period beginning prior to November 10, 2026 shall be calculated on the basis of a 360-day year consisting of twelve 30-day months, and dividends payable on the Series O in respect of any Dividend Period beginning on or after November 10, 2026 shall be calculated by the Calculation Agent on the basis of a 360-day year and the actual number of days elapsed in such Dividend Period. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series O, for each Dividend Period beginning prior to November 10, 2026, shall be a rate per annum equal to 5.30%, and the dividend rate on the Series O, for each Dividend Period beginning on or after November 10, 2026, shall be a rate per annum equal to LIBOR (as defined below) for such Dividend Period plus 3.834%. LIBOR, with respect to any Dividend Period beginning on or after November 10, 2026, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters screen LIBOR01 (or any successor or replacement page) as of approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the rate described in the preceding paragraph does not appear on the Reuters screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M., New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by major banks in New York City selected by the

Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

If no quotation is provided as described in the preceding paragraph, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate LIBOR or any of the foregoing lending rates, shall determine LIBOR for such Dividend Period in its sole discretion.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series O shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series O as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series O remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series O have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman, Sachs & Co., or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series O and any shares of Parity Stock, all dividends declared on the Series O and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared *pro rata* so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series O and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment

dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series O shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series O shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series O as to such distribution, in full an amount equal to \$25,000 per share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series O and all holders of any stock of the Corporation ranking equally with the Series O as to such distribution, the amounts paid to the holders of Series O and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series O and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series O and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series O, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series O receive cash, securities or other property for their shares, or the sale, lease or

exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series O is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series O at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after November 10, 2026 (or, if not a Business Day, the next succeeding Business Day), or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided herein below) an amount equal to any dividends per share that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series O shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series O without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital guidelines applicable to the Corporation.

(b) **No Sinking Fund.** The Series O will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series O will have no right to require redemption of any shares of Series O.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series O shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series O designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series O. Notwithstanding the foregoing, if the Series O or any depositary shares representing interests in the Series O are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series O at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series O to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4)

the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series O at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series O shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) **General.** The holders of Series O shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series O shall not have been declared and paid for any Dividend Periods that, in aggregate, equal at least 18 months, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series O, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series O, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the

holders of record of at least 20% of the Series O or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series O or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series O for consecutive Dividend Periods that, in aggregate, equal at least one year after a Nonpayment Event, then the right of the holders of Series O to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series O and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series O and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series O and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series O are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series O and any Voting Preferred Stock at the time outstanding and entitled to

vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series O with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series O.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series O, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series O, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series O remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series O immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series O or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series O with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series O.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series O and one or more but not all other series of Preferred Stock, then only the Series O and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series O, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series O, the Corporation may amend, alter, supplement or repeal any terms of the Series O:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series O that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series O shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series O shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series O (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series O is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series O and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series O are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series O may deem and treat the record holder of any share of Series O as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series O shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series O shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series O shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**5.00% FIXED-TO-FLOATING RATE NON-CUMULATIVE
PREFERRED STOCK, SERIES P**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, by unanimous written consent dated October 26, 2017, adopted the following resolution creating a series of 66,000 shares of Preferred Stock of the Corporation designated as “5.00% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series P”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “5.00% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series P” (“Series P”). Each share of Series P shall be identical in all respects to every other share of Series P, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series P shall be 66,000. Shares of Series P that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series P.

Section 3. Definitions. As used herein with respect to Series P:

(a) “30/360 (ISDA) Day Count Convention” means the number of days in the Dividend Period in respect of which payment is being made divided by 360, calculated on a formula basis as follows:

$$\frac{[360 \times (Y2 - Y1)] + [30 \times (M2 - M1)] + (D2 - D1)}{360}$$

where:

“Y1” is the year, expressed as a number, in which the first day of the Dividend Period falls;

“Y2” is the year, expressed as a number, in which the day immediately following the last day included in the Dividend Period falls;

“M1” is the calendar month, expressed as a number, in which the first day of the Dividend Period falls;

“M2” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Dividend Period falls;

“D1” is the first calendar day, expressed as a number, of the Dividend Period, unless such number would be 31, in which case D1 will be 30; and

“D2” is the calendar day, expressed as a number, immediately following the last day included in the Dividend Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30.

(b) “Actual/360 (ISDA) Day Count Convention” means the actual number of days in the Interest Period *divided* by 360.

(c) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(d) “Board of Directors” means the board of directors of the Corporation.

(e) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(f) “Business Day” means (i) from the original issue date to and including November 10, 2022 (or, if such day is not a Monday, Tuesday, Wednesday, Thursday or Friday or is a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, the next day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close), a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in

New York City are generally authorized or obligated by law or executive order to close, and (ii) thereafter, a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close and is a London Business Day.

(g) "Calculation Agent" means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, *provided* that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series P is outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(h) "Certificate of Designations" means this Certificate of Designations relating to the Series P, as it may be amended from time to time.

(i) "Certification of Incorporation" shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(j) "Common Stock" means the common stock, par value \$0.01 per share, of the Corporation.

(k) "Junior Stock" means the Common Stock and any other class or series of stock of the Corporation (other than Series P) that ranks junior to Series P either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(l) "London Business Day" means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in London generally are authorized or obligated by law, regulation or executive order to close and is a day on which dealings in U.S. dollars are transacted in the London interbank market.

(m) "Parity Stock" means any class or series of stock of the Corporation (other than Series P) that ranks equally with Series P both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(n) "Preferred Stock" means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series P.

(o) "Regulatory Capital Treatment Event" means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series P, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the

initial issuance of any share of Series P, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series P, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series P then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy rules of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy rules or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series P is outstanding.

(p) “Representative Amount” means, at any time, an amount that, in the Calculation Agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

(q) “Reuters screen” means the display on the Thomson Reuters Eikon service, or any successor or replacement service.

(r) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series P are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series P) that rank equally with Series P either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series P shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends per each share of Series P at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series P. Such dividends shall be payable in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on the 10th day of May and November of each year, commencing on May 10, 2018 and ending on November 10, 2022, and on the 10th day of February, May, August and November of each year following November 10, 2022 (“Dividend Payment Dates”); *provided* that if any such Dividend Payment Date that occurs on or before November 10, 2022 is a day that is not a Business Day, such dividend shall instead be payable on the immediately succeeding Business Day without interest or other payment in respect of such

delayed payment, *and provided further*, if any such Dividend Payment Date that would otherwise occur for any Dividend Period after the Dividend Period ending on but excluding November 10, 2022 is a day that is not a Business Day, such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately succeeding Business Day unless such immediately succeeding Business Day falls in the next calendar month, in which case such Dividend Payment Date shall instead be (and any such dividend shall accrue to and instead be payable on) the immediately preceding Business Day. Dividends on Series P shall not be cumulative; holders of Series P shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series P shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy rules of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy rules or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series P on any Dividend Payment Date will be payable to holders of record of Series P as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a "Dividend Record Date"). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each dividend period (a "Dividend Period") shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series P, *provided* that, for any share of Series P issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series P in respect of any Dividend Period beginning prior to November 10, 2022 shall be calculated on the basis of the 30/360 (ISDA) Day Count Convention, and dividends payable on the Series P in respect of any Dividend Period beginning on or after November 10, 2022 shall be calculated by the Calculation Agent on the basis of the Actual/360 (ISDA) Day Count Convention. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The dividend rate on the Series P, for each Dividend Period beginning prior to November 10, 2022, shall be a rate per annum equal to 5.00%, and the dividend rate on the Series P, for each Dividend Period beginning on or after November 10, 2022, shall be a

rate per annum equal to LIBOR (as defined below) for such Dividend Period plus 2.874%. LIBOR, with respect to any Dividend Period beginning on or after November 10, 2022, means the offered rate expressed as a percentage per annum for three-month deposits in U.S. dollars on the first day of such Dividend Period, as that rate appears on Reuters screen LIBOR01 (or any successor or replacement page) as of approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period.

If the Calculation Agent determines on the relevant dividend determination date that the LIBOR base rate described in the preceding paragraph has been discontinued, then the Calculation Agent will use a substitute or successor base rate that it has determined in its sole discretion is most comparable to the LIBOR base rate, provided that if the Calculation Agent determines there is an industry-accepted successor base rate, then the Calculation Agent shall use such successor base rate. If the Calculation Agent has determined a substitute or successor base rate in accordance with the foregoing, the Calculation Agent in its sole discretion may determine the business day convention, the definition of business day and the dividend determination date to be used and any other relevant methodology for calculating such substitute or successor base rate, including any adjustment factor needed to make such substitute or successor base rate comparable to the LIBOR base rate, in a manner that is consistent with industry-accepted practices for such substitute or successor base rate. Unless the Calculation Agent uses a substitute or successor base rate as so provided, the following will apply.

(i) If the LIBOR base rate described in the second preceding paragraph does not appear on the Reuters screen LIBOR01 (or any successor or replacement page), LIBOR shall be determined on the basis of the rates, at approximately 11:00 A.M., London time, on the second London Business Day immediately preceding the first day of such Dividend Period, at which deposits of the following kind are offered to prime banks in the London interbank market by four major banks in that market selected by the Calculation Agent: three-month deposits in U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount. The Calculation Agent shall request the principal London office of each of these banks to provide a quotation of its rate at approximately 11:00 A.M., London time. If at least two quotations are provided, LIBOR for such Dividend Period shall be the arithmetic mean of such quotations.

(ii) If fewer than two quotations are provided as described in the preceding paragraph, LIBOR for such Dividend Period shall be the arithmetic mean of the rates for loans of the following kind to leading European banks quoted, at approximately 11:00 A.M., New York City time, on the second London Business Day immediately preceding the first day of such Dividend Period, by major banks in New York City selected by the Calculation Agent: three-month loans of U.S. dollars, beginning on the first day of such Dividend Period, and in a Representative Amount.

(iii) If no quotation is provided as described in the preceding paragraph, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate LIBOR or any of the foregoing lending rates, shall determine LIBOR for such Dividend Period in its sole discretion.

The Calculation Agent's determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, will be maintained on file at the Corporation's principal offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series P shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series P as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series P remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series P have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman Sachs & Co. LLC, or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within a Dividend Period) in full upon the Series P and any shares of Parity Stock, all dividends declared on the Series P and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared *pro rata* so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series P and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series P shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series P shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series P as to such distribution, in full an amount equal to \$25,000 per share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series P and all holders of any stock of the Corporation ranking equally with the Series P as to such distribution, the amounts paid to the holders of Series P and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series P and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series P and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series P, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series P receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of

the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series P is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series P at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, from time to time, on any date on or after November 10, 2022 (or, if not a Business Day, the next succeeding Business Day), or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided herein below) an amount equal to any dividends per share that have accrued but not been paid for the then-current Dividend Period to but excluding the redemption date, whether or not such dividends have been declared. The redemption price for any shares of Series P shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series P without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital rules applicable to the Corporation.

(b) **No Sinking Fund.** The Series P will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series P will have no right to require redemption of any shares of Series P.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series P shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 30 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series P designated for redemption shall not affect the validity of the proceedings for the redemption of any other shares of Series P. Notwithstanding the foregoing, if the Series P or any depository shares representing interests in the Series P are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series P at such time and in any manner permitted by such facility. Each such notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series P to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4)

the place or places where certificates for such shares are to be surrendered for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series P at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series P shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) **General.** The holders of Series P shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series P shall not have been declared and paid for any Dividend Periods that, in aggregate, equal at least 18 months, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series P, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock Directors"), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series P, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the

holders of record of at least 20% of the Series P or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series P or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series P for consecutive Dividend Periods that, in aggregate, equal at least one year after a Nonpayment Event, then the right of the holders of Series P to elect the Preferred Stock Directors shall cease (but subject always to revesting of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series P and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series P and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series P and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series P are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series P and any Voting Preferred Stock at the time outstanding and entitled to

vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series P with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series P.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series P, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series P, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series P remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series P immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series P or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series P with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series P.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series P and one or more but not all other series of Preferred Stock, then only the Series P and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series P, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series P, the Corporation may amend, alter, supplement or repeal any terms of the Series P:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series P that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series P shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series P shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series P (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series P is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series P and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series P are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series P may deem and treat the record holder of any share of Series P as the true and lawful owner thereof for all purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series P shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series P shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series P shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

CERTIFICATE OF DESIGNATIONS

OF

**5.50% FIXED-RATE RESET NON-CUMULATIVE PREFERRED
STOCK, SERIES Q**

OF

THE GOLDMAN SACHS GROUP, INC.

THE GOLDMAN SACHS GROUP, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the “Corporation”), in accordance with the provisions of Sections 103 and 151 thereof, DOES HEREBY CERTIFY:

The Securities Issuance Committee (the “Committee”) of the board of directors of the Corporation (the “Board of Directors”), in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, by unanimous written consent dated June 13th, 2019, adopted the following resolution creating a series of 20,000 shares of Preferred Stock of the Corporation designated as “5.50% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series Q”.

RESOLVED, that pursuant to the authority vested in the Committee and in accordance with the resolutions of the Board of Directors dated October 28, 2011, the provisions of the restated certificate of incorporation and the amended and restated bylaws of the Corporation and applicable law, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares of such series, and the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the shares of such series, are as follows:

Section 1. Designation. The distinctive serial designation of such series of Preferred Stock is “5.50% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series Q” (“Series Q”). Each share of Series Q shall be identical in all respects to every other share of Series Q, except as to the respective dates from which dividends thereon shall accrue, to the extent such dates may differ as permitted pursuant to Section 4(a) below.

Section 2. Number of Shares. The authorized number of shares of Series Q shall be 20,000. Shares of Series Q that are redeemed, purchased or otherwise acquired by the Corporation shall be cancelled and shall revert to authorized but unissued shares of Series Q.

Section 3. Definitions. As used herein with respect to Series Q:

(a) “30/360 (ISDA) Day Count Convention” means the number of days in the Dividend Period in respect of which payment is being made divided by 360, calculated on a formula basis as follows:

$$\frac{[360 \times (Y2 - Y1)] + [30 \times (M2 - M1)] + (D2 - D1)}{360}$$

where:

“Y1” is the year, expressed as a number, in which the first day of the Dividend Period falls;

“Y2” is the year, expressed as a number, in which the day immediately following the last day included in the Dividend Period falls;

“M1” is the calendar month, expressed as a number, in which the first day of the Dividend Period falls;

“M2” is the calendar month, expressed as a number, in which the day immediately following the last day included in the Dividend Period falls;

“D1” is the first calendar day, expressed as a number, of the Dividend Period, unless such number would be 31, in which case D1 will be 30; and

“D2” is the calendar day, expressed as a number, immediately following the last day included in the Dividend Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30.

(b) “Appropriate Federal Banking Agency” means the “appropriate federal banking agency” with respect to the Corporation as that term is defined in Section 3(q) of the Federal Deposit Insurance Act or any successor provision.

(c) “Board of Directors” means the board of directors of the Corporation.

(d) “ByLaws” means the amended and restated bylaws of the Corporation, as they may be amended from time to time.

(e) “Business Day” means a day that is a Monday, Tuesday, Wednesday, Thursday or Friday and is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close, subject to any adjustments made by the Calculation Agent as provided for herein.

(f) “Calculation Agent” means, at any time, the person or entity appointed by the Corporation and serving as such agent at such time. The Corporation may terminate any such appointment and may appoint a successor agent at any time and from time to time, provided that the Corporation shall use its best efforts to ensure that there is, at all relevant times when the Series Q is

outstanding, a person or entity appointed and serving as such agent. The Calculation Agent may be a person or entity affiliated with the Corporation.

(g) “Certificate of Designations” means this Certificate of Designations relating to the Series Q, as it may be amended from time to time.

(h) “Certification of Incorporation” shall mean the restated certificate of incorporation of the Corporation, as it may be amended from time to time, and shall include this Certificate of Designations.

(i) “Common Stock” means the common stock, par value \$0.01 per share, of the Corporation.

(j) “Dividend Payment Date” means the 10th day of February and August of each year, commencing on February 10, 2020.

(k) “Dividend Period” is the period from and including a Dividend Payment Date to but excluding the next Dividend Payment Date, except that the initial dividend period will commence on and include the original issue date of the Series Q and will end on and exclude the February 10, 2020 Dividend Payment Date.

(l) “Five-Year Treasury Rate” means:

- The average of the yields on actively traded U.S. treasury securities adjusted to constant maturity, for five-year maturities, for the five Business Days appearing under the caption “Treasury Constant Maturities” in the most recently published statistical release designated H.15 Daily Update or any successor publication which is published by the Board of Governors of the Federal Reserve System, as determined by the Calculation Agent in its sole discretion.
- If no calculation is provided as described above, then the Calculation Agent, after consulting such sources as it deems comparable to any of the foregoing calculations, or any such source as it deems reasonable from which to estimate the five-year treasury rate, shall determine the five-year treasury rate in its sole discretion, provided that if the Calculation Agent determines there is an industry-accepted successor five-year treasury rate, then the Calculation Agent shall use such successor rate. If the Calculation Agent has determined a substitute or successor base rate in accordance with the foregoing, the Calculation Agent in its sole discretion may determine the Business Day convention, the definition of Business Day and the Reset Dividend Determination Dates to be used and any other relevant methodology for calculating such substitute or successor base rate, including any adjustment factor needed to make such substitute or successor base rate comparable to the

Five-Year Treasury Rate, in a manner that is consistent with industry-accepted practices for such substitute or successor base rate.

The Five-Year Treasury Rate will be determined by the Calculation Agent on the Reset Dividend Determination Date.

(m) “Junior Stock” means the Common Stock and any other class or series of stock of the Corporation (other than Series Q) that ranks junior to Series Q either or both as to the payment of dividends and/or as to the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(n) “Parity Stock” means any class or series of stock of the Corporation (other than Series Q) that ranks equally with Series Q both in the payment of dividends and in the distribution of assets on any liquidation, dissolution or winding up of the Corporation.

(o) “Preferred Stock” means any and all series of Preferred Stock, having a par value of \$0.01 per share, of the Corporation, including the Series Q.

(p) “Regulatory Capital Treatment Event” means the good faith determination by the Corporation that, as a result of (i) any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States that is enacted or becomes effective after the initial issuance of any share of Series Q, (ii) any proposed change in those laws, rules or regulations that is announced or becomes effective after the initial issuance of any share of Series Q, or (iii) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations or policies with respect thereto that is announced after the initial issuance of any share of Series Q, there is more than an insubstantial risk that the Corporation will not be entitled to treat the full liquidation preference amount of \$25,000 per share of Series Q then outstanding as “tier 1 capital” (or its equivalent) for purposes of the capital adequacy rules of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy rules or regulations of any successor Appropriate Federal Banking Agency) as then in effect and applicable, for so long as any share of Series Q is outstanding.

(q) “Reset Date” means August 10, 2024 and each date falling on the fifth anniversary of the preceding Reset Date, in each case, regardless of whether such day is a Business Day.

(r) “Reset Dividend Determination Date” means, in respect of any Reset Period, the day falling three Business Days prior to the beginning of such Reset Period, subject to any adjustments made by the Calculation Agent as provided for herein.

(s) “Reset Period” means the period from and including August 10, 2024 to, but excluding, the next following Reset Date and thereafter each period from and including each Reset Date to, but excluding, the next following Reset Date.

(t) “Voting Preferred Stock” means, with regard to any election or removal of a Preferred Stock Director (as defined in Section 7(b) below) or any other matter as to which the holders of Series Q are entitled to vote as specified in Section 7 of this Certificate of Designations, any and all series of Preferred Stock (other than Series Q) that rank equally with Series Q either as to the payment of dividends or as to the distribution of assets upon liquidation, dissolution or winding up of the Corporation and upon which like voting rights have been conferred and are exercisable with respect to such matter.

Section 4. Dividends.

(a) **Rate.** Holders of Series Q shall be entitled to receive, when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) out of funds legally available for the payment of dividends under Delaware law, non-cumulative cash dividends per each share of Series Q at the rate determined as set forth below in this Section (4) applied to the liquidation preference amount of \$25,000 per share of Series Q. Such dividends shall be payable in arrears (as provided below in this Section 4(a)), but only when, as and if declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), on each Dividend Payment Date. Dividends will accrue (i) from the date of original issue to, but excluding, August 10, 2024 at a fixed rate per annum of 5.50%, and (ii) from, and including August 10, 2024, during each Reset Period, at a rate per annum equal to the Five-Year Treasury Rate as of the most recent Reset Dividend Determination Date plus 3.623%; provided that if any such Dividend Payment Date is a day that is not a Business Day, such dividend shall instead be payable on the next succeeding Business Day without interest or other payment in respect of such delayed payment. Dividends on Series Q shall not be cumulative; holders of Series Q shall not be entitled to receive any dividends not declared by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) and no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend not so declared.

Dividends on the Series Q shall not be declared or set aside for payment if and to the extent such dividends would cause the Corporation to fail to comply with the capital adequacy rules of the Board of Governors of the Federal Reserve System (or, as and if applicable, the capital adequacy rules or regulations of any successor Appropriate Federal Banking Agency) applicable to the Corporation.

Dividends that are payable on Series Q on any Dividend Payment Date will be payable to holders of record of Series Q as they appear on the stock register of the Corporation on the applicable record date, which shall be the 15th calendar day before such Dividend Payment Date or such other record date fixed by the Board of Directors or the

Committee (or another duly authorized committee of the Board of Directors) that is not more than 60 nor less than 10 days prior to such Dividend Payment Date (each, a “Dividend Record Date”). Any such day that is a Dividend Record Date shall be a Dividend Record Date whether or not such day is a Business Day.

Each Dividend Period shall commence on and include a Dividend Payment Date (other than the initial Dividend Period, which shall commence on and include the date of original issue of the Series Q, *provided* that, for any share of Series Q issued after such original issue date, the initial Dividend Period for such shares may commence on and include such other date as the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) shall determine and publicly disclose) and shall end on and include the calendar day next preceding the next Dividend Payment Date. Dividends payable on the Series Q in respect of any Dividend Period shall be calculated on the basis of the 30/360 (ISDA) Day Count Convention. Dividends payable in respect of a Dividend Period shall be payable in arrears - i.e., on the first Dividend Payment Date after such Dividend Period.

The Calculation Agent’s determination of any dividend rate, and its calculation of the amount of dividends for any Dividend Period, and any other adjustments made by the Calculation Agent pursuant to the terms hereof will be maintained on file at the Corporation’s offices, will be made available to any stockholder upon request and will be final and binding in the absence of manifest error.

Holders of Series Q shall not be entitled to any dividends, whether payable in cash, securities or other property, other than dividends (if any) declared and payable on the Series Q as specified in this Section 4 (subject to the other provisions of this Certificate of Designations).

(b) **Priority of Dividends.** So long as any share of Series Q remains outstanding, no dividend shall be declared or paid on the Common Stock or any other shares of Junior Stock (other than a dividend payable solely in Junior Stock), and no Common Stock or other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by the Corporation, directly or indirectly (other than as a result of a reclassification of Junior Stock for or into other Junior Stock, or the exchange or conversion of one share of Junior Stock for or into another share of Junior Stock and other than through the use of the proceeds of a substantially contemporaneous sale of Junior Stock) during a Dividend Period, unless the full dividends for the latest completed Dividend Period on all outstanding shares of Series Q have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside). The foregoing provision shall not restrict the ability of Goldman Sachs & Co. LLC, or any other affiliate of the Corporation, to engage in any market-making transactions in Junior Stock in the ordinary course of business.

When dividends are not paid (or declared and a sum sufficient for payment thereof set aside) on any Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend

payment date falling within a Dividend Period) in full upon the Series Q and any shares of Parity Stock, all dividends declared on the Series Q and all such Parity Stock and payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) shall be declared *pro rata* so that the respective amounts of such dividends shall bear the same ratio to each other as all accrued but unpaid dividends per share on the Series Q and all Parity Stock payable on such Dividend Payment Date (or, in the case of Parity Stock having dividend payment dates different from the Dividend Payment Dates, on a dividend payment date falling within the Dividend Period related to such Dividend Payment Date) bear to each other.

Subject to the foregoing, such dividends (payable in cash, securities or other property) as may be determined by the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors) may be declared and paid on any securities, including Common Stock and other Junior Stock, from time to time out of any funds legally available for such payment, and the Series Q shall not be entitled to participate in any such dividends.

Section 5. Liquidation Rights.

(a) **Voluntary or Involuntary Liquidation.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, holders of Series Q shall be entitled to receive, out of the assets of the Corporation or proceeds thereof (whether capital or surplus) available for distribution to stockholders of the Corporation, and after satisfaction of all liabilities and obligations to creditors of the Corporation, before any distribution of such assets or proceeds is made to or set aside for the holders of Common Stock and any other stock of the Corporation ranking junior to the Series Q as to such distribution, in full an amount equal to \$25,000 per share, together with an amount equal to all dividends (if any) that have been declared but not paid prior to the date of payment of such distribution (but without any amount in respect of dividends that have not been declared prior to such payment date).

(b) **Partial Payment.** If in any distribution described in Section 5(a) above the assets of the Corporation or proceeds thereof are not sufficient to pay the Liquidation Preferences (as defined below) in full to all holders of Series Q and all holders of any stock of the Corporation ranking equally with the Series Q as to such distribution, the amounts paid to the holders of Series Q and to the holders of all such other stock shall be paid *pro rata* in accordance with the respective aggregate Liquidation Preferences of the holders of Series Q and the holders of all such other stock. In any such distribution, the "Liquidation Preference" of any holder of stock of the Corporation shall mean the amount otherwise payable to such holder in such distribution (assuming no limitation on the assets of the Corporation available for such distribution), including an amount equal to any declared but unpaid dividends (and, in the case of any holder of stock other than Series Q and on which dividends accrue on a cumulative basis, an amount equal to any unpaid, accrued, cumulative dividends, whether or not declared, as applicable).

(c) **Residual Distributions.** If the Liquidation Preference has been paid in full to all holders of Series Q, the holders of other stock of the Corporation shall be entitled to receive all remaining assets of the Corporation (or proceeds thereof) according to their respective rights and preferences.

(d) **Merger, Consolidation and Sale of Assets Not Liquidation.** For purposes of this Section 5, the merger or consolidation of the Corporation with any other corporation or other entity, including a merger or consolidation in which the holders of Series Q receive cash, securities or other property for their shares, or the sale, lease or exchange (for cash, securities or other property) of all or substantially all of the assets of the Corporation, shall not constitute a liquidation, dissolution or winding up of the Corporation.

Section 6. Redemption.

(a) **Optional Redemption.** The Series Q is perpetual and has no maturity date. The Corporation may, at its option, redeem the shares of Series Q at the time outstanding, upon notice given as provided in Section 6(c) below, (i) in whole or in part, on any Dividend Payment Date on or after August 10, 2024, or (ii) in whole but not in part at any time within 90 days following a Regulatory Capital Treatment Event, in each case, at a redemption price per share equal to \$25,000, plus (except as otherwise provided herein below) an amount equal to any declared and unpaid dividends per share to but excluding the redemption date, without accumulation of undeclared dividends. The redemption price for any shares of Series Q shall be payable on the redemption date to the holder of such shares against surrender of the certificate(s) evidencing such shares to the Corporation or its agent. Any declared but unpaid dividends payable on a redemption date that occurs subsequent to the Dividend Record Date for a Dividend Period shall not be paid to the holder entitled to receive the redemption price on the redemption date, but rather shall be paid to the holder of record of the redeemed shares on such Dividend Record Date relating to the Dividend Payment Date as provided in Section 4 above. Notwithstanding the foregoing, the Corporation may not redeem shares of Series Q without having received the prior approval of the Appropriate Federal Banking Agency if then required under capital rules applicable to the Corporation.

(b) **No Sinking Fund.** The Series Q will not be subject to any mandatory redemption, sinking fund or other similar provisions. Holders of Series Q will have no right to require redemption of any shares of Series Q.

(c) **Notice of Redemption.** Notice of every redemption of shares of Series Q shall be given by first class mail, postage prepaid, addressed to the holders of record of the shares to be redeemed at their respective last addresses appearing on the books of the Corporation. Such mailing shall be at least 15 days and not more than 60 days before the date fixed for redemption. Any notice mailed as provided in this Subsection shall be conclusively presumed to have been duly given, whether or not the holder receives such notice, but failure duly to give such notice by mail, or any defect in such notice or in the mailing thereof, to any holder of shares of Series Q designated for redemption shall not

affect the validity of the proceedings for the redemption of any other shares of Series Q. Notwithstanding the foregoing, if the Series Q or any depositary shares representing interests in the Series Q are issued in book-entry form through The Depository Trust Company or any other similar facility, notice of redemption may be given to the holders of Series Q at such time and in any manner permitted by such facility. Each notice given to a holder shall state: (1) the redemption date; (2) the number of shares of Series Q to be redeemed and, if less than all the shares held by such holder are to be redeemed, the number of such shares to be redeemed from such holder; (3) the redemption price; and (4) the place or places where holders may surrender certificates evidencing shares of Series Q Preferred Stock for payment of the redemption price.

(d) **Partial Redemption.** In case of any redemption of only part of the shares of Series Q at the time outstanding, the shares to be redeemed shall be selected either *pro rata* or by lot. Subject to the provisions hereof, the Corporation shall have full power and authority to prescribe the terms and conditions upon which shares of Series Q shall be redeemed from time to time. If fewer than all the shares represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares without charge to the holder thereof.

(e) **Effectiveness of Redemption.** If notice of redemption has been duly given and if on or before the redemption date specified in the notice all funds necessary for the redemption have been set aside by the Corporation, separate and apart from its other funds, in trust for the *pro rata* benefit of the holders of the shares called for redemption, so as to be and continue to be available therefor, then, notwithstanding that any certificate for any share so called for redemption has not been surrendered for cancellation, on and after the redemption date dividends shall cease to accrue on all shares so called for redemption, all shares so called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith on such redemption date cease and terminate, except only the right of the holders thereof to receive the amount payable on such redemption, without interest. Any funds unclaimed at the end of three years from the redemption date shall, to the extent permitted by law, be released to the Corporation, after which time the holders of the shares so called for redemption shall look only to the Corporation for payment of the redemption price of such shares.

Section 7. Voting Rights.

(a) **General.** The holders of Series Q shall not have any voting rights except as set forth below or as otherwise from time to time required by law.

(b) **Right To Elect Two Directors Upon Nonpayment Events.** If and whenever dividends on any shares of Series Q shall not have been declared and paid for any Dividend Periods that, in aggregate, equal at least 18 months, whether or not consecutive (a "Nonpayment Event"), the number of directors then constituting the Board of Directors shall automatically be increased by two and the holders of Series Q, together with the holders of all outstanding shares of Voting Preferred Stock, voting together as a single class, shall be entitled to elect the two additional directors (the "Preferred Stock

Directors”), *provided* that the Board of Directors shall at no time include more than two Preferred Stock Directors (including, for purposes of this limitation, all directors that the holders of any series of Voting Preferred Stock are entitled to elect pursuant to like voting rights).

In the event that the holders of the Series Q, and such other holders of Voting Preferred Stock, shall be entitled to vote for the election of the Preferred Stock Directors following a Nonpayment Event, such directors shall be initially elected following such Nonpayment Event only at a special meeting called at the request of the holders of record of at least 20% of the Series Q or of any other series of Voting Preferred Stock then outstanding (unless such request for a special meeting is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders of the Corporation, in which event such election shall be held only at such next annual or special meeting of stockholders), and at each subsequent annual meeting of stockholders of the Corporation. Such request to call a special meeting for the initial election of the Preferred Stock Directors after a Nonpayment Event shall be made by written notice, signed by the requisite holders of Series Q or any series of Voting Preferred Stock, and delivered to the Secretary of the Corporation in such manner as provided for in Section 9 below, or as may otherwise be required by law.

When dividends have been paid (or declared and a sum sufficient for payment thereof set aside) in full on the Series Q for consecutive Dividend Periods that, in aggregate, equal at least one year after a Nonpayment Event, then the right of the holders of Series Q to elect the Preferred Stock Directors shall cease (but subject always to reversion of such voting rights in the case of any future Nonpayment Event), and, if and when any rights of holders of Series Q and Voting Preferred Stock to elect the Preferred Stock Directors shall have ceased, the terms of office of all the Preferred Stock Directors shall forthwith terminate and the number of directors constituting the Board of Directors shall automatically be reduced accordingly.

Any Preferred Stock Director may be removed at any time without cause by the holders of record of a majority of all of the outstanding shares of the Series Q and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). So long as a Nonpayment Event shall continue, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment Event) may be filled by the written consent of the Preferred Stock Director remaining in office, or if none remains in office, by a vote of the holders of record of a majority of all of the outstanding shares of the Series Q and Voting Preferred Stock, when they have the voting rights described above (voting together as a single class). Any such vote of stockholders to remove, or to fill a vacancy in the office of, a Preferred Stock Director may be taken only at a special meeting of such stockholders, called as provided above for an initial election of Preferred Stock Director after a Nonpayment Event (unless such request is received less than 90 days before the date fixed for the next annual or special meeting of the stockholders, in which event such election shall be held at such next annual or special meeting of stockholders). The Preferred Stock Directors shall each be entitled to one vote per director on any matter that shall come before the Board of

Directors for a vote. Each Preferred Stock Director elected at any special meeting of stockholders or by written consent of the other Preferred Stock Director shall hold office until the next annual meeting of the stockholders if such office shall not have previously terminated as above provided.

(c) **Other Voting Rights.** So long as any shares of Series Q are outstanding, in addition to any other vote or consent of stockholders required by law or by the Certificate of Incorporation, the vote or consent of the holders of at least 66 $\frac{2}{3}$ % of the shares of Series Q and any Voting Preferred Stock at the time outstanding and entitled to vote thereon, voting together as a single class, given in person or by proxy, either in writing without a meeting or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(i) **Authorization of Senior Stock.** Any amendment or alteration of the Certificate of Incorporation to authorize or create, or increase the authorized amount of, any shares of any class or series of capital stock of the Corporation ranking senior to the Series Q with respect to either or both the payment of dividends and/or the distribution of assets on any liquidation, dissolution or winding up of the Corporation;

(ii) **Amendment of Series Q.** Any amendment, alteration or repeal of any provision of the Certificate of Incorporation so as to materially and adversely affect the special rights, preferences, privileges or voting powers of the Series Q, taken as a whole; or

(iii) **Share Exchanges, Reclassifications, Mergers and Consolidations.** Any consummation of a binding share exchange or reclassification involving the Series Q, or of a merger or consolidation of the Corporation with another corporation or other entity, unless in each case (x) the shares of Series Q remain outstanding or, in the case of any such merger or consolidation with respect to which the Corporation is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent, and (y) such shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, and limitations and restrictions thereof, taken as a whole, as are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series Q immediately prior to such consummation, taken as a whole;

provided, however, that for all purposes of this Section 7(c), any increase in the amount of the authorized or issued Series Q or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equally with and/or junior to the Series Q with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon liquidation, dissolution or winding up of the Corporation will

not be deemed to adversely affect the rights, preferences, privileges or voting powers of the Series Q.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation specified in this Section 7(c) would adversely affect the Series Q and one or more but not all other series of Preferred Stock, then only the Series Q and such series of Preferred Stock as are adversely affected by and entitled to vote on the matter shall vote on the matter together as a single class (in lieu of all other series of Preferred Stock).

(d) **Changes for Clarification.** Without the consent of the holders of the Series Q, so long as such action does not adversely affect the rights, preferences, privileges and voting powers, and limitations and restrictions thereof, of the Series Q, the Corporation may amend, alter, supplement or repeal any terms of the Series Q:

(i) to cure any ambiguity, or to cure, correct or supplement any provision contained in this Certificate of Designations that may be defective or inconsistent; or

(ii) to make any provision with respect to matters or questions arising with respect to the Series Q that is not inconsistent with the provisions of this Certificate of Designations.

(e) **Changes after Provision for Redemption.** No vote or consent of the holders of Series Q shall be required pursuant to Section 7(b), (c) or (d) above if, at or prior to the time when any such vote or consent would otherwise be required pursuant to such Section, all outstanding shares of Series Q shall have been redeemed, or shall have been called for redemption upon proper notice and sufficient funds shall have been set aside for such redemption, in each case pursuant to Section 6 above.

(f) **Procedures for Voting and Consents.** The rules and procedures for calling and conducting any meeting of the holders of Series Q (including, without limitation, the fixing of a record date in connection therewith), the solicitation and use of proxies at such a meeting, the obtaining of written consents and any other aspect or matter with regard to such a meeting or such consents shall be governed by any rules the Board of Directors or the Committee (or another duly authorized committee of the Board of Directors), in its discretion, may adopt from time to time, which rules and procedures shall conform to the requirements of the Certificate of Incorporation, the ByLaws, applicable law and any national securities exchange or other trading facility on which the Series Q is listed or traded at the time. Whether the vote or consent of the holders of a plurality, majority or other portion of the shares of Series Q and all Voting Preferred Stock has been cast or given on any matter on which the holders of shares of Series Q are entitled to vote shall be determined by the Corporation by reference to the specified liquidation amounts of the shares voted or covered by the consent.

Section 8. Record Holders. To the fullest extent permitted by applicable law, the Corporation and the transfer agent for the Series Q may deem and treat the record holder of any share of Series Q as the true and lawful owner thereof for all

purposes, and neither the Corporation nor such transfer agent shall be affected by any notice to the contrary.

Section 9. Notices. All notices or communications in respect of Series Q shall be sufficiently given if given in writing and delivered in person or by first class mail, postage prepaid, or if given in such other manner as may be permitted in this Certificate of Designations, in the Certificate of Incorporation or ByLaws or by applicable law.

Section 10. No Preemptive Rights. No share of Series Q shall have any rights of preemption whatsoever as to any securities of the Corporation, or any warrants, rights or options issued or granted with respect thereto, regardless of how such securities, or such warrants, rights or options, may be designated, issued or granted.

Section 11. Other Rights. The shares of Series Q shall not have any voting powers, preferences or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth herein or in the Certificate of Incorporation or as provided by applicable law.

October 31, 2019

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 October 31, 2019 on our review of the consolidated statement of financial condition of The Goldman Sachs Group, Inc. and its subsidiaries (the Company) as of September 30, 2019, the related consolidated statements of earnings, comprehensive income and changes in shareholders' equity for the three and nine months ended September 30, 2019 and 2018, and the consolidated statements of cash flows for the nine months ended September 30, 2019 and 2018 included in the Company's quarterly report on Form 10-Q for the quarter ended September 30, 2019 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

CERTIFICATIONS

I, David M. Solomon, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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: October 31, 2019

/s/ David M. Solomon
Name: David M. Solomon
Title: Chief Executive Officer

CERTIFICATIONS

I, Stephen M. Scherr, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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: October 31, 2019

/s/ Stephen M. Scherr
Name: Stephen M. Scherr
Title: Chief Financial Officer

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 September 30, 2019 (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: October 31, 2019

/s/ David M. Solomon
Name: David M. Solomon
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 September 30, 2019 (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: October 31, 2019

/s/ Stephen M. Scherr

Name: Stephen M. Scherr
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.