

## **Supplement No. 3**

pursuant to Section 16 para. 1 of the German Securities Prospectus Act (in the version applicable as of the date of approval of the base prospectus) (*Wertpapierprospektgesetz*)

dated 23 August 2019

to the base prospectus of

**Goldman, Sachs & Co. Wertpapier GmbH**  
**Frankfurt am Main**

**(the "Issuer")**

unconditionally guaranteed by

**Goldman Sachs International**  
**England**

**(the "Guarantor")**

*This supplement of Goldman, Sachs & Co. Wertpapier GmbH is related to the following  
base prospectus:*

*Base Prospectus for Securities (issued in the form of Certificates, Notes or Warrants)*

*dated 30 January 2019*

*(the "**Base Prospectus**")*

The significant new factor resulting in this supplement (the "**Supplement**") is the publication of the Unaudited Quarterly Financial Report of Goldman Sachs International for the fiscal quarter ended 31 May 2019 ("**GSI's 2019 Second Quarter Report**") on 13 August 2019.

The information contained in the Base Prospectus shall be supplemented as follows:

1. In the Base Prospectus in section "**I. Summary**" under "**Element B.19 (B.12)**" of the subsection "**2. Information relating to Goldman Sachs International as Guarantor**" on pages 16 et seq. the whole text shall be replaced as follows:

"The following table shows selected key historical financial information in relation to GSI which is derived from the audited financial statements as of 30 November 2018, 31 December 2017 and 31 December 2016 for each of the years in the period ended 30 November 2018, 31 December 2017 and 31 December 2017 and from the unaudited interim financial statements as of 31 May 2019 for the six months ended 31 May 2019 and 30 June 2018. The audited financial statements have been prepared in accordance with Financial Reporting Standards ("**FRS**") 101 and the unaudited interim financial statements as of 31 May 2019 have been prepared in accordance with FRS 104. FRS forms part of the U.K. Generally Accepted Accounting Practice ("**U.K. GAAP**"):

<i>(in USD millions)</i>	<b>As at and for the six months (unaudited)</b>		<b>As at and for the year (audited)</b>		
	<b>1 December 2018 – 31 May 2019</b>	<b>1 January – 30 June 2018</b>	<b>1 January - 30 November 2018*</b>	<b>1 January - 31 December 2017</b>	<b>1 January – 31 December 2016</b>
Profit before taxation	1,193	1,574	3,030	2,091	1,943
Profit for the financial period	915	1,172	2,198	1,557	1,456

<i>(in USD millions)</i>	<b>As of (unaudited)</b>	<b>As of (audited)</b>		
	<b>31 May 2019</b>	<b>30 November 2018*</b>	<b>31 December 2017</b>	<b>31 December 2016</b>
Fixed Assets	378	315	210	140
Current Assets	957,095	886,652	939,863	934,129
Total Shareholder's funds	35,130	33,917	31,701	27,533

\* During the period, GSI changed its accounting reference date from December 31 to November 30. The figures included in the table represent the results of GSI for the 11 month period ending on, or the date, as the context requires, November 30, 2018.

There has been no material adverse change in the prospects of GSI since 30 November 2018.

Not applicable; there has been no significant change in the financial or trading position particular to the Goldman Sachs Group subsequent to 31 May 2019."

2. In the Base Prospectus in the German translation of the summary (Deutsche Übersetzung der Zusammenfassung) in section "I. Summary" under "Punkt B.19 (B.12)" of the subsection "2. Informationen bezüglich der Goldman Sachs International als Garantin" on pages 143 et seq. the whole text shall be replaced as follows:

"Die folgende Tabelle enthält ausgewählte wesentliche Finanzinformationen bezüglich GSI, die den geprüften Abschlüssen vom 30. November 2018 bzw. 31. Dezember 2017 bzw. 31. Dezember 2016 jeweils für das am 30. November 2018 bzw. 31. Dezember 2017 bzw. 31. Dezember 2016 geendete Geschäftsjahr sowie dem ungeprüften Zwischenabschluss vom 31. Mai 2019 jeweils für die am 31. Mai 2019 bzw. 30. Juni 2018 geendeten sechs Monate entnommen sind. Die geprüften Abschlüsse wurden gemäß den Financial Reporting Standards ("FRS") 101 und der ungeprüfte Zwischenabschluss vom 31. Mai 2019 gemäß FRS 104 erstellt. Die FRS sind Teil der U.K. Generally Accepted Accounting Practice ("U.K. GAAP"):

<i>(in Mio. USD)</i>	<b>Zum und für die sechs Monate (ungeprüft)</b>		<b>Zum und für das Jahr (geprüft)</b>		
	<b>1. Dezember 2018 – 31. Mai 2019</b>	<b>1. Januar – 30. Juni 2018</b>	<b>1. Januar - 30. November 2018*</b>	<b>1. Januar - 31. Dezember 2017</b>	<b>1. Januar - 31. Dezember 2016</b>
Ergebnis vor Steuern	1.193	1.574	3.030	2.091	1.943
Ergebnis für die Rechnungsperiode	915	1.172	2.198	1.557	1456
	<b>Zum (ungeprüft)</b>		<b>Zum (geprüft)</b>		
<i>(in Mio. USD)</i>	<b>31. Mai 2019</b>	<b>30. November 2018*</b>	<b>31. Dezember 2017</b>	<b>31. Dezember 2016</b>	
Sachanlagen		378	315	210	140
Umlaufvermögen		957.095	886.652	939.863	934.129
Gesamteigenkapital		35.130	33.917	31.701	27.533

\* Während des betreffenden Zeitraums hat GSI den Stichtag für die Rechnungslegung vom 31. Dezember auf den 30. November geändert. Die in der Tabelle enthaltenen Zahlen zeigen die Ergebnisse von GSI für den Zeitraum von 11 Monaten endend am bzw. zum 30. November 2018.

Es gab seit dem 30. November 2018 keine wesentlichen Änderungen in den Geschäftsaussichten für GSI. Entfällt; seit dem 31. Mai 2019 sind keine wesentlichen Veränderungen in der Finanzlage oder Handelsposition der Goldman Sachs Gruppe eingetreten."

3. In the Base Prospectus in section "VIII. Important information about the Guarantor" on page 793 the first paragraph shall be replaced as follows:

"With respect to required information about Goldman Sachs International as Guarantor of the Securities, reference is made pursuant to Section 11 para. 1 sentence 1 no. 1 German Securities Prospectus Act (in the version applicable as of the date of approval of the base prospectus) to the Registration Document of Goldman Sachs International dated 23 January 2019 (as supplemented from time to time) (the "**Registration Document of GSI**") which has been filed with the Competent Authority (detailed information regarding the pages in the Registration Document of GSI, to which reference is made with respect to the required information about the Guarantor, can be found in section "XIII. Information incorporated by reference"). Further required information about Goldman

Sachs International as Guarantor of the Securities can be found in Appendix I (H-1 to H-91), Appendix II (I-1 to I-38) and Appendix III (J-1 to J-40) of this Base Prospectus. With respect to further substantial information in respect of Goldman Sachs International as Guarantor of the Securities reference pursuant to Section 11 para. 1 sentence 2 German Securities Prospectus Act (in the version applicable as of the date of approval of the base prospectus) is made to the following documents which are filed with the *Commission de Surveillance du Secteur Financier* (the "CSSF") in Luxembourg:

- the report on the Regulatory Ratios of Goldman Sachs International for the fiscal quarter ended 30 September 2018 ("**GSI's Regulatory Ratios, 30 September 2018**"), published on 17 October 2018;
- the report on the Regulatory Ratios of Goldman Sachs International for the fiscal quarter ended 31 December 2018 ("**GSI's Regulatory Ratios, 31 December 2018**"), published on 18 January 2019;
- the disclosure notice of Goldman Sachs International in relation to key recent events ("**GSI's Notice of Recent Events**") dated 18 January 2019; and
- the report on the Regulatory Ratios of Goldman Sachs International for the six months ended 31 May 2019 ("**GSI's Regulatory Ratios, 31 May 2019**"), published on 25 June 2019."

*4. In the Base Prospectus after page I-38 of the section "**Appendix II - Unaudited Quarterly Financial Report of Goldman Sachs International for the fiscal quarter ended 28 February 2019**" the GSI's 2019 Second Quarter Report of Goldman Sachs International as laid out in the following "**Appendix III - Unaudited Quarterly Financial Report of Goldman Sachs International for the fiscal quarter ended 31 May 2019**" is newly inserted as pages J-1 to J-40 into the Base Prospectus.*

## **Appendix III**

### **Unaudited Quarterly Financial Report of Goldman Sachs International for the fiscal quarter ended 31 May 2019**

The Supplement and the Base Prospectus are available free of charge at the offices of Goldman Sachs International, Zweigniederlassung Frankfurt, MesseTurm, Friedrich-Ebert-Anlage 49, 60308 Frankfurt am Main and/or at Goldman Sachs Bank Europe SE, MesseTurm, Friedrich-Ebert-Anlage 49, 60308 Frankfurt am Main and furthermore are available on the website [www.gs.de/service/wertpapierprospekte](http://www.gs.de/service/wertpapierprospekte).

**Pursuant to article 16 para. 3 of the German Securities Prospectus Act (in the version applicable as of the date of approval of the Base Prospectus), investors who have already agreed to purchase or subscribe for securities offered under the Base Prospectus before this Supplement has been published shall have the right, exercisable within a time period of two working days after the publication of this Supplement, to withdraw their acceptances, provided that the new factor, mistake or inaccuracy arose before the final closing of the offer to the public and the delivery of the securities. No grounds must be stated for the withdrawal, which must be made in text form. The timely dispatch of the withdrawal is sufficient to comply with the deadline.**

**Addressee of a withdrawal is Goldman Sachs International, Zweigniederlassung Frankfurt, MesseTurm, Friedrich-Ebert-Anlage 49, 60308 Frankfurt am Main.**

## Management Report

### Introduction

Goldman Sachs International (GSI or the company) provides a wide range of financial services to clients located worldwide. The company also operates a number of branches and representative offices across Europe, the Middle East and Africa (EMEA) to provide financial services to clients in those regions.

The company's primary regulators are the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA).

The company's ultimate parent undertaking and controlling entity is The Goldman Sachs Group, Inc. (Group Inc.). Group Inc. is a bank holding company and a financial holding company regulated by the Board of Governors of the Federal Reserve System (FRB). In relation to the company, "group undertaking" means Group Inc. or any of its subsidiaries. Group Inc., together with its consolidated subsidiaries, form "GS Group". GS Group 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. GS Group has a presence in EMEA through a number of subsidiaries, including GSI.

The company seeks to be the advisor of choice for its clients and a leading participant in global financial markets. As part of GS Group, the company also enters into transactions with affiliates in the normal course of business as part of its market-making activities and general operations. The company, consistent with GS Group, reports its activities in four business segments: Investment Banking; Institutional Client Services; Investing & Lending; and Investment Management.

The company strives to maintain a work environment that fosters professionalism, excellence, diversity, cooperation among employees and high standards of business ethics. The company recognises that it needs the most talented people to deliver outstanding results for clients. A diverse workforce in terms of gender, ethnicity, sexual orientation, background, culture and education ensures the development of better ideas, products and services. For further information about Goldman Sachs' people, culture and commitment to diversity, see [www.goldmansachs.com/our-firm/people-and-culture](http://www.goldmansachs.com/our-firm/people-and-culture).

In 2018, the company changed its accounting reference date from December 31 to November 30. As such, the company's second quarter for 2019 is for the three months ended May 31, 2019 and its half year for 2019 is for the six months ended May 31, 2019, with comparative information being presented for the three months ended June 30, 2018 and six months ended June 30, 2018, respectively. References to "the financial statements" are to the unaudited financial statements as presented in Part II of this financial report. All references to May 2019 and June 2018 refer to the periods ended, or the dates, as the context requires, May 31, 2019 and June 30, 2018, respectively. All references to November 2018 refer to the date November 30, 2018. All references to "the 2018 Annual Report" are to the company's Annual Report for the period ended November 30, 2018.

Unless otherwise stated, all amounts in this financial report are prepared in accordance with United Kingdom Generally Accepted Accounting Practices (U.K. GAAP). The company also prepares results under United States Generally Accepted Accounting Principles (U.S. GAAP), which are included in the consolidated financial statements of GS Group.

### Executive Overview

#### Profit and Loss Account

**Three Months Ended May 2019 versus June 2018.** The profit and loss account is set out on page 18 of this financial report. The company's profit for the three months ended May 2019 was \$686 million, an increase of 8% compared with the three months ended June 2018.

Net revenues were \$2.36 billion for the three months ended May 2019, 10% higher than the three months ended June 2018, reflecting significantly higher net revenues in Institutional Client Services, partially offset by significantly lower net revenues in Investment Management and lower net revenues in Investment Banking and Investing & Lending.

Administrative expenses were \$1.45 billion for the three months ended May 2019, 16% higher than the three months ended June 2018, primarily due to significantly higher direct costs of employment.

**Six Months Ended May 2019 versus June 2018.** The company's profit for the six months ended May 2019 was \$915 million, a decrease of 22% compared with the six months ended June 2018.

Net revenues were \$4.05 billion for the six months ended May 2019, 11% lower than the six months ended June 2018, primarily due to significantly lower net revenues in Investment Management and lower net revenues in Institutional Client Services and Investment Banking.

## Management Report

Administrative expenses were \$2.73 billion for the six months ended May 2019, 4% lower than the six months ended June 2018, primarily due to lower direct costs of employment.

See “Results of Operations” below for information about the company’s net revenues, segment reporting and administrative expenses.

### Capital Ratios

As of May 2019, the company’s Common Equity Tier 1 ratio was 12.0% (under CRD IV as defined in “Equity Capital Management and Regulatory Capital — Regulatory Capital”).

### Balance Sheet

The balance sheet is set out on page 19 of this financial report. In the subsequent paragraphs, total assets are the sum of “Fixed assets”, “Current assets” and “Pension surplus”. Total liabilities are the sum of “Creditors: amounts falling due within one year”, “Creditors: amounts falling due after more than one year” and “Provisions for liabilities”.

As of May 2019, total assets were \$957.90 billion, an increase of \$70.53 billion from November 2018, reflecting increases in financial instruments owned of \$107.49 billion and debtors of \$4.91 billion, partially offset by decreases in collateralised agreements of \$33.35 billion and cash at bank and in hand of \$8.61 billion. Financial instruments owned increased primarily due to an increase in derivative instruments, principally due to an increase in interest rate derivatives, and an increase in cash instruments, principally due to an increase in equity securities. Debtors increased primarily due to an increase in cash collateral posted. Collateralised agreements decreased primarily due to changes in firm and client activity. Cash at bank and in hand decreased primarily due to a decrease in cash deposits held as Global Core Liquid Assets (GCLA).

As of May 2019, total liabilities were \$922.77 billion, an increase of \$69.32 billion from November 2018, reflecting increases in financial instruments sold, but not yet purchased of \$89.96 billion and other creditors of \$4.25 billion, partially offset by a decrease in collateralised financings of \$24.85 billion. Financial instruments sold, but not yet purchased increased primarily due to an increase in derivative instruments, principally as a result of an increase in interest rate derivatives. Other creditors increased primarily due to an increase in unsecured borrowings and an increase in cash collateral received. Collateralised financings decreased primarily due to changes in firm and client activity.

Total level 3 financial assets were \$5.32 billion as of May 2019 and \$5.31 billion as of November 2018. See Note 19 to the financial statements for further information about level 3 financial assets, including changes in level 3 financial assets and related fair value measurement.

Under U.S. GAAP, as of May 2019, total assets were \$386.52 billion and total liabilities were \$359.96 billion. The company’s total assets and total liabilities under U.S. GAAP differ from those reported under U.K. GAAP primarily due to the company presenting derivative balances gross under U.K. GAAP if they are not net settled in the normal course of business, even where it has a legally enforceable right to offset those balances.

## Business Environment

During the three months ended May 2019, global economic activity appeared to be stable compared with the three months ended February 2019. Continued concerns about future global growth and a mixed macroeconomic environment led U.S. markets to anticipate multiple U.S. Federal Reserve rate cuts this year and other global central banks to emphasise accommodative monetary policies. The market sentiment in the three months ended May 2019 was also impacted by continued geopolitical uncertainty, including developments related to the U.K.’s decision to leave the E.U. (Brexit) and the threat of expanding trade wars between the U.S. and both China and Mexico.



## Management Report

### Results of Operations

#### Net Revenues

Net revenues include the net profit arising from transactions, with both third parties and affiliates, in securities, foreign exchange and other financial instruments, and fees and commissions. This is inclusive of associated interest and dividends. See “Segment Reporting” below for further information.

#### Segment Reporting

The table below presents the net revenues of the company’s segments.

	Three Months Ended		Six Months Ended	
	May 2019	June 2018	May 2019	June 2018
<i>\$ in millions</i>				
<b>Investment Banking</b>				
Financial Advisory	\$ 148	\$ 165	\$ 388	\$ 318
Underwriting	197	225	296	460
<b>Total Investment Banking</b>	<b>\$ 345</b>	<b>\$ 390</b>	<b>\$ 684</b>	<b>\$ 778</b>
<b>Institutional Client Services</b>				
Fixed Income, Currency and				
Commodities Client Execution	\$ 743	\$ 500	\$1,379	\$1,309
Equities	976	866	1,498	1,698
<b>Total Institutional Client Services</b>	<b>\$1,719</b>	<b>\$1,366</b>	<b>\$2,877</b>	<b>\$3,007</b>
<b>Investing &amp; Lending</b>	<b>\$ 161</b>	<b>\$ 174</b>	<b>\$ 212</b>	<b>\$ 297</b>
<b>Investment Management</b>	<b>\$ 134</b>	<b>\$ 216</b>	<b>\$ 277</b>	<b>\$ 464</b>
<b>Total net revenues</b>	<b>\$2,359</b>	<b>\$2,146</b>	<b>\$4,050</b>	<b>\$4,546</b>

#### Investment Banking

Investment Banking consists of:

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

**Underwriting.** Includes equity and debt underwriting of 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.

**Three Months Ended May 2019 versus June 2018.** Net revenues in Investment Banking were \$345 million for the three months ended May 2019, 12% lower than the three months ended June 2018.

Net revenues in Financial Advisory were \$148 million for the three months ended May 2019, 10% lower than the three months ended June 2018, primarily reflecting a decrease in completed mergers and acquisitions transactions.

Net revenues in Underwriting were \$197 million for the three months ended May 2019, 12% lower than the three months ended June 2018, due to significantly lower net revenues in equity underwriting, partially offset by higher net revenues in debt underwriting.

As of May 2019, the company’s investment banking transaction backlog decreased compared with February 2019, due to significantly lower estimated net revenues from potential debt underwriting transactions and lower estimated net revenues from potential advisory transactions and potential equity underwriting transactions.

**Six Months Ended May 2019 versus June 2018.** Net revenues in Investment Banking were \$684 million for the six months ended May 2019, 12% lower than the six months ended June 2018.

Net revenues in Financial Advisory were \$388 million for the six months ended May 2019, 22% higher than the six months ended June 2018, primarily reflecting an increase in completed mergers and acquisitions transactions.

Net revenues in Underwriting were \$296 million for the six months ended May 2019, 36% lower than the six months ended June 2018, due to significantly lower net revenues in debt and equity underwriting.

## Management Report

As of May 2019, the company's investment banking transaction backlog decreased compared with November 2018, due to significantly lower estimated net revenues from potential advisory transactions and lower estimated net revenues from potential debt underwriting transactions, partially offset by higher estimated net revenues from potential equity underwriting transactions.

The company's investment banking transaction backlog represents an estimate of future net revenues from investment banking transactions where the company believes that future revenue realisation is more likely than not. The company believes changes in its investment banking transaction backlog may be a useful indicator of client activity levels which, over the long term, impact net revenues.

### Institutional Client Services

Institutional Client Services consists of:

**Fixed Income, Currency and Commodities Client Execution (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, 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 over-the-counter (OTC) transactions. Equities also includes the 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.

The company's 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 its inventory, and interest income and interest expense related to the holding, hedging and funding of its inventory (collectively, market-making inventory changes).

**Three Months Ended May 2019 versus June 2018.** Net revenues in Institutional Client Services were \$1.72 billion for the three months ended May 2019, 26% higher than the three months ended June 2018.

Net revenues in FICC Client Execution were \$743 million for the three months ended May 2019, 49% higher than the three months ended June 2018, due to significantly higher net revenues in credit products, mortgages and commodities as well as higher net revenues in currencies, partially offset by lower net revenues in interest rates products.

Net revenues in Equities were \$976 million for the three months ended May 2019, 13% higher than the three months ended June 2018, due to significantly higher net revenues in equities client execution and commission and fees, partially offset by lower net revenues in securities services.

**Six Months Ended May 2019 versus June 2018.** Net revenues in Institutional Client Services were \$2.88 billion for the six months ended May 2019, 4% lower than the six months ended June 2018.

Net revenues in FICC Client Execution were \$1.38 billion for the six months ended May 2019, 5% higher than the six months ended June 2018, primarily due to significantly higher net revenues in credit products and mortgages, partially offset by lower net revenues in interest rates products and currencies.

Net revenues in Equities were \$1.50 billion for the six months ended May 2019, 12% lower than the six months ended June 2018, primarily due to significantly lower net revenues in equities client execution.

## Management Report

### Investing & Lending

Investing & Lending includes direct investments made by the company, which are typically longer-term in nature, and net revenues associated with providing investing services to other GS Group entities.

**Three Months Ended May 2019 versus June 2018.** Net revenues in Investing & Lending were \$161 million for the three months ended May 2019, 7% lower compared with the three months ended June 2018.

**Six Months Ended May 2019 versus June 2018.** Net revenues in Investing & Lending were \$212 million for the six months ended May 2019, 29% lower than the six months ended June 2018, primarily due to significantly lower net gains from investments in debt instruments.

### Investment Management

Investment Management provides investment management and wealth advisory services, including portfolio management and financial counselling, and brokerage and other transaction services to high-net-worth individuals and families. Investment Management also includes net revenues associated with providing investing services to funds managed by GS Group.

**Three Months Ended May 2019 versus June 2018.** Net revenues in Investment Management were \$134 million for the three months ended May 2019, 38% lower than the three months ended June 2018, primarily due to significantly lower incentive fees from providing investing services to funds managed by GS Group.

**Six Months Ended May 2019 versus June 2018.** Net revenues in Investment Management were \$277 million for the six months ended May 2019, 40% lower than the six months ended June 2018, primarily due to significantly lower incentive fees from providing investing services to funds managed by GS Group.

### Administrative Expenses

Administrative expenses are primarily influenced by compensation (including the impact of the Group Inc. share price on share-based compensation), headcount and levels of business activity. Direct costs of employment include salaries, allowances, estimated year-end discretionary compensation, amortisation and mark-to-market of share-based compensation and other items such as benefits. Discretionary compensation is significantly impacted by, among other factors, the level of net revenues, overall financial performance, prevailing labour markets, business mix, the structure of share-based compensation programmes and the external environment.

The table below presents the company's administrative expenses and headcount.

	Three Months Ended		Six Months Ended	
	May 2019	June 2018	May 2019	June 2018
<i>\$ in millions</i>				
Direct costs of employment	\$ 684	\$ 567	\$1,253	\$1,490
Management charges from/to group undertakings relating to staff costs	43	57	92	107
Brokerage, clearing, exchange and distribution fees	230	224	430	438
Market development	28	22	49	44
Communications and technology	32	31	62	59
Depreciation and amortisation	33	16	53	30
Occupancy	35	43	116	83
Professional fees	47	56	98	113
Management charges from/to other services	76	55	141	123
Other expenses	238	177	440	365
<b>Total administrative expenses</b>	<b>\$1,446</b>	<b>\$1,248</b>	<b>\$2,734</b>	<b>\$2,852</b>
<b>Total headcount at period-end</b>	<b>4,013</b>	<b>3,923</b>		

In the table above:

- Direct costs of employment included a credit of \$56 million for the three months ended May 2019, a credit of \$121 million for the three months ended June 2018, a charge of \$1 million for the six months ended May 2019 and a credit of \$63 million for the six months ended June 2018 relating to the mark-to-market of share-based compensation.
- Headcount consists of the company's employees, and excludes consultants and temporary staff previously reported as part of total staff. As a result, the company has reclassified \$19 million of consultant and temporary staff expenses from direct costs of employment to professional fees for the three months ended June 2018 and \$38 million for the six months ended June 2018 to conform to the current presentation.

The table below presents charges from and to group undertakings for both management charges relating to staff costs and management charges relating to other services.

	Three Months Ended		Six Months Ended	
	May 2019	June 2018	May 2019	June 2018
<i>\$ in millions</i>				
Charges from group undertakings	\$116	\$120	\$ 237	\$ 250
Charges to group undertakings	(73)	(63)	(145)	(143)
Management charges relating to staff costs	43	57	92	107
Charges from group undertakings	103	94	190	198
Charges to group undertakings	(27)	(39)	(49)	(75)
Management charges relating to other services	76	55	141	123
<b>Total</b>	<b>\$119</b>	<b>\$112</b>	<b>\$ 233</b>	<b>\$ 230</b>

## Management Report

### Three Months Ended May 2019 versus June 2018.

Administrative expenses were \$1.45 billion for the three months ended May 2019, 16% higher than the three months ended June 2018.

Direct costs of employment were \$684 million for the three months ended May 2019, 21% higher than the three months ended June 2018. Direct costs of employment include the mark-to-market impact of share-based compensation. Excluding the mark-to-market impact of share-based compensation for both periods, direct costs of employment were \$740 million for the three months ended May 2019, 8% higher than the three months ended June 2018, reflecting an increase in operating performance.

Other expenses were \$238 million for the three months ended May 2019, 34% higher than the three months ended June 2018, primarily reflecting an increase in transaction tax related expenses.

Headcount decreased 5% compared with February 2019.

### Six Months Ended May 2019 versus June 2018.

Administrative expenses were \$2.73 billion for the six months ended May 2019, 4% lower than the six months ended June 2018.

Direct costs of employment were \$1.25 billion for the six months ended May 2019, 16% lower than the six months ended June 2018. Direct costs of employment include the mark-to-market impact of share-based compensation. Excluding the mark-to-market impact of share-based compensation for both periods, direct costs of employment were \$1.25 billion for the six months ended May 2019, 19% lower than the six months ended June 2018, reflecting a decline in operating performance.

Occupancy expenses were \$116 million for the six months ended May 2019, 40% higher than the six months ended June 2018, primarily due to the company incurring an expense for the early termination of a lease.

Other expenses were \$440 million for the six months ended May 2019, 21% higher than the six months ended June 2018, primarily reflecting an increase in transaction tax related expenses.

Headcount decreased 5% compared with November 2018.

### Interest Payable and Similar Expenses

Interest payable and similar expenses consists of interest on long-term subordinated loans from parent and group undertakings.

### Three Months Ended May 2019 versus June 2018.

Interest payable and similar expenses was \$64 million for the three months ended May 2019, essentially unchanged compared with the three months ended June 2018.

### Six Months Ended May 2019 versus June 2018.

Interest payable and similar expenses was \$129 million for the six months ended May 2019, 3% higher than the six months ended June 2018 due to an increase in average interest rates.

### Tax on Profit

The effective tax rate for six months ended May 2019 was 23.3%, which compares to the U.K. corporate tax rate applicable to the company of 27.0% for 2019. The effective tax rate represents the company's tax on profit divided by its profit before taxation.

## Balance Sheet and Funding Sources

### Balance Sheet Management

One of the company's risk management disciplines is its ability to manage the size and composition of its balance sheet. The company leverages the firmwide balance sheet management process performed at the GS Group level to manage these factors. While the asset base of Group Inc. and its subsidiaries changes due to client activity, market fluctuations and business opportunities, the size and composition of the balance sheet also reflects factors including (i) the overall risk tolerance of GS Group, (ii) the amount of equity capital held by GS Group and (iii) the funding profile of GS Group, among other factors. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" for information about the company's equity capital management process.

In order to ensure appropriate risk management, the company seeks to maintain a sufficiently liquid balance sheet and leverages GS Group's processes to dynamically manage its assets and liabilities, which include (i) balance sheet planning, (ii) balance sheet limits, (iii) monitoring of key metrics and (iv) scenario analyses. See "Balance Sheet and Funding Sources — Balance Sheet Management" in Part I of the 2018 Annual Report for further information about the company's balance sheet management process.

## Management Report

### Funding Sources

The company's primary sources of funding are collateralised financings, intercompany unsecured borrowings, external unsecured borrowings and shareholder's funds. The company raises this funding through a number of different products, including:

- Repurchase agreements and securities loaned;
- Intercompany loans from Group Inc. and other affiliates;
- Debt securities issued includes notes, certificates and warrants; and
- Other borrowings includes funded derivatives and transfers of assets accounted for as financings rather than sales.

The table below presents information about the company's funding sources.

<i>\$ in millions</i>	As of			
	May 2019		November 2018	
Collateralised financings	\$127,296	51%	\$152,145	56%
Intercompany unsecured borrowings	63,387	25%	61,493	23%
External unsecured borrowings	25,537	10%	25,197	9%
Total shareholder's funds	35,130	14%	33,917	12%
<b>Total funding sources</b>	<b>\$251,350</b>	<b>100%</b>	<b>\$272,752</b>	<b>100%</b>

The company generally distributes funding products through its own sales force and third-party distributors to a large, diverse creditor base in a variety of global markets. The company believes that its relationships with external creditors are critical to its liquidity. These creditors include banks, securities lenders, corporations, pension funds, insurance companies, mutual funds and individuals. The company has imposed various internal guidelines to monitor creditor concentration across its external funding programmes.

**Secured Funding.** The company funds a significant amount of inventory on a secured basis, with external counterparties, as well as with affiliates. Secured funding includes collateralised financings in the balance sheet. The company may also pledge its inventory as collateral for securities borrowed under a securities lending agreement. The company also uses its own inventory to cover transactions in which the company or its clients have sold securities that have not yet been purchased. Secured funding is less sensitive to changes in Group Inc. and/or the company's credit quality than unsecured funding, due to the posting of collateral to lenders. Nonetheless, the company continually analyses the refinancing risk of its secured funding activities, taking into account trade tenors, maturity profiles, counterparty concentrations, collateral eligibility and counterparty roll over probabilities. The company seeks to mitigate its refinancing risk by executing term trades with staggered maturities, diversifying counterparties, raising excess secured funding, and pre-funding residual risk through the GCLA.

The company seeks to raise secured funding with a term appropriate for the liquidity of the assets that are being financed, and seeks longer maturities for secured funding collateralised by asset classes that may be harder to fund on a secured basis, especially during times of market stress.

A majority of the company's secured funding for securities not eligible for inclusion in the GCLA is executed through term repurchase agreements and securities loaned contracts. The company also raises secured funding through debt securities issued and other borrowings.

The weighted average maturity of the company's external secured funding included in collateralised financings in the balance sheet, excluding funding that can only be collateralised by liquid government obligations, exceeded 120 days as of May 2019.

**Intercompany Unsecured Borrowings.** The company sources funding through intercompany unsecured borrowings from Goldman Sachs Funding LLC (Funding IHC), Group Inc. and other affiliates.

Funding IHC is a wholly-owned, direct subsidiary of Group Inc. that facilitates the execution of GS Group's preferred resolution strategy. The majority of GS Group's unsecured funding is raised by Group Inc., which lends the necessary funds to Funding IHC and other subsidiaries, including the company, to meet asset financing, liquidity and capital requirements. The benefits of this approach to subsidiary funding are enhanced control and greater flexibility to meet the funding requirements of the company and other subsidiaries. Intercompany unsecured borrowings include loans, subordinated loans and other borrowings.

**External Unsecured Borrowings.** External unsecured borrowings include debt securities issued, other borrowings, bank loans and overdrafts.

**Shareholder's Funds.** Shareholder's funds is a stable and perpetual source of funding. See Notes 13 and 14 to the financial statements for further information.

## Management Report

### Equity Capital Management and Regulatory Capital

Capital adequacy is of critical importance to the company. The company has in place a comprehensive capital management policy that provides a framework, defines objectives and establishes guidelines to assist the company in maintaining the appropriate level and composition of capital in both business-as-usual and stressed conditions.

#### Equity Capital Management

The company determines the appropriate amount and composition of its equity capital by considering multiple factors, including the company's current and future regulatory capital requirements, the results of the company's capital planning and stress testing process, the results of resolution capital models and other factors, such as rating agency guidelines, the business environment and conditions in the financial markets.

The company's capital planning and stress testing process incorporates internally designed stress tests and those required under the PRA's Internal Capital Adequacy Assessment Process (ICAAP). It is also designed to identify and measure material risks associated with business activities, including market risk, credit risk, operational risk and other risks. The company's goal is to hold sufficient capital to ensure that it remains adequately capitalised after experiencing a severe stress event. The company's assessment of capital adequacy is viewed in tandem with its assessment of liquidity adequacy and is integrated into its overall risk management structure, governance and policy framework.

In addition, as part of the company's comprehensive capital management policy, a contingency capital plan is maintained that provides a framework for analysing 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.

#### Regulatory Capital

The company is subject to the capital framework for E.U.-regulated financial institutions prescribed in the E.U. Fourth Capital Requirements Directive (CRD IV) and the E.U. Capital Requirements Regulation (CRR). These capital regulations are largely based on the Basel Committee on Banking Supervision's (Basel Committee) final capital framework for strengthening international capital standards (Basel III). The Basel Committee is the primary global standard setter for prudential bank regulation, and its member jurisdictions implement regulations based on its standards and guidelines.

The risk-based capital requirements are expressed as capital ratios that compare measures of regulatory capital to risk-weighted assets (RWAs). The Common Equity Tier 1 (CET1) ratio is defined as CET1 divided by RWAs. The Tier 1 capital ratio is defined as Tier 1 capital divided by RWAs. The total capital ratio is defined as total capital divided by RWAs.

Under CRD IV, the minimum CET1, Tier 1 capital and Total capital ratios (collectively the Pillar 1 capital requirements) are supplemented by:

- A capital conservation buffer of 2.5% of RWAs, consisting entirely of capital that qualifies as CET1, phased in ratably in annual increments of 0.625% from January 1, 2016 and became fully effective on January 1, 2019.
- A countercyclical capital buffer of up to 2.5% (and also consisting entirely of CET1) in order to counteract excessive credit growth. The buffer only applies to the company's exposures to certain types of counterparties based in jurisdictions which have announced a countercyclical buffer. The buffer currently adds 0.28% to the CET1 minimum ratio. The countercyclical capital buffer applicable to the company could change in the future and, as a result, the company's minimum ratios could increase.
- The individual capital requirement under Pillar 2A (an additional amount to cover risks not adequately captured in Pillar 1). The PRA performs a periodic supervisory review of the company's ICAAP, which leads to a final determination by the PRA of the individual capital requirement under Pillar 2A. This is a point in time assessment of the minimum amount of capital the PRA considers that a firm should hold.

#### Regulatory Risk-Based Capital Ratios

The table below presents information about the company's risk-based capital requirements under CRD IV.

	As of	
	May 2019	November 2018
CET1 capital ratio	8.7%	8.1%
Tier 1 capital ratio	10.7%	10.1%
Total capital ratio	13.3%	12.7%

In the table above, the risk-based capital requirements incorporate the Pillar 2A capital requirement received from the PRA and could change in the future.

In addition to the Pillar 2A capital requirement, the PRA also defines the forward looking capital requirement which represents the PRA's view of the capital that the company would require to absorb losses in stressed market conditions. This is known as Pillar 2B or the "PRA buffer" and is not reflected in the requirements shown above.

## Management Report

The table below presents information about the company's risk-based capital ratios under CRD IV.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
<b>Risk-based capital and RWAs</b>		
CET1 capital	\$ 24,613	\$ 23,899
Additional Tier 1 notes	\$ 8,300	\$ 8,300
Tier 1 capital	\$ 32,913	\$ 32,199
Tier 2 capital	\$ 5,377	\$ 5,377
Total capital	\$ 38,290	\$ 37,576
RWAs	\$205,284	\$206,007
<b>Risk-based capital ratios</b>		
CET1 capital ratio	12.0%	11.6%
Tier 1 capital ratio	16.0%	15.6%
Total capital ratio	18.7%	18.2%

In the table above, CET1 capital ratio, Tier 1 capital ratio and Total capital ratio as of May 2019 included the company's profit after foreseeable charges and dividends for the six months ended May 2019 (which will be finalised upon verification by the company's external auditors). This contributed approximately 31 basis points to the company's risk-based capital ratios, which represents the company's profit for the financial period reduced by foreseeable charges and dividends, divided by its RWAs.

During the six months ended May 2019 and eleven months ended November 2018, the company was in compliance with the capital requirements set by the PRA.

Certain CRD IV rules are subject to final technical standards and clarifications, which will be issued by the European Banking Authority (EBA) and adopted by the European Commission and PRA. All capital, RWAs and estimated ratios are based on current interpretation, expectations and understanding of CRD IV and may evolve as its interpretation and application is discussed with the company's regulators.

### Capital Resources

The table below presents capital components under CRD IV.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
Called up share capital	\$ 590	\$ 582
Share premium account	5,196	4,864
Retained earnings	20,985	20,070
Accumulated other comprehensive income	59	101
Deductions	(2,217)	(1,718)
<b>Common Equity Tier 1</b>	<b>24,613</b>	<b>23,899</b>
Additional Tier 1 notes	8,300	8,300
<b>Tier 1 capital</b>	<b>\$32,913</b>	<b>\$32,199</b>
<b>Tier 2 and Total capital</b>		
Long-term subordinated loans	\$ 5,377	\$ 5,377
Tier 2 capital	5,377	5,377
<b>Total capital</b>	<b>\$38,290</b>	<b>\$37,576</b>

### Risk-Weighted Assets

The table below presents the components of RWAs within the company's regulatory capital ratios under CRD IV.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
Credit RWAs	\$104,169	\$107,554
Market RWAs	85,707	84,349
Operational RWAs	15,408	14,104
<b>Total</b>	<b>\$205,284</b>	<b>\$206,007</b>

In the table above, credit RWAs as of May 2019 decreased by \$3.39 billion compared with November 2018, primarily due to reduced derivative exposures.

See "Equity Capital Management and Regulatory Capital" in Part I of the 2018 Annual Report for a description of each RWA component.

### Leverage Ratio

The company is required to monitor and disclose its leverage ratio using the CRR's definition of exposure as amended by the European Commission Leverage Ratio Delegated Act. In June 2019, the European Commission finalised rules amending the CRR to implement the Basel III leverage ratio framework by establishing a 3% minimum leverage ratio requirement for certain E.U. financial institutions, including the company. 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 the company on June 28, 2021.

The table below presents the leverage ratio under the CRR.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
Tier 1 capital	\$ 32,913	\$ 32,199
Leverage exposure	\$747,007	\$771,438
<b>Leverage ratio</b>	<b>4.4%</b>	<b>4.2%</b>

In the table above, the leverage ratio as of May 2019 included the company's profit after foreseeable charges and dividends for the six months ended May 2019 (which will be finalised upon verification by the company's external auditors). This contributed approximately 9 basis points to the company's leverage ratio, which represents the company's profit for the financial period reduced by foreseeable charges and dividends, divided by its leverage exposure. The leverage ratio as of May 2019 increased compared with November 2018, primarily due to the decrease in the company's leverage exposure.

## Management Report

This leverage ratio is based on the company's current interpretation and understanding of this rule and may evolve as the interpretation and application of this rule is discussed with the company's regulators.

### Minimum Requirement for Own Funds and Eligible Liabilities

The company is subject to a minimum requirement for own funds and eligible liabilities (MREL) 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. The company's regulatory capital and a portion of its intercompany borrowings, which have been amended to meet subordination and maturity requirements, serve to meet its MREL requirement.

As of May 2019, the company's MREL was \$51.58 billion, which is in excess of its minimum transitional requirement and comprised of the company's total regulatory capital of \$38.29 billion and eligible senior intercompany borrowings of \$13.29 billion.

## Regulatory Matters and Other Developments

The company's businesses are subject to significant and evolving regulation. Reforms have been adopted or are being considered by regulators and policy-makers worldwide. The expectation is that the principal areas of impact from regulatory reform for the company will be increased regulatory capital requirements and increased regulation and restriction on certain activities. However, 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 E.U. and/or U.K. regulations.

See "Regulatory Matters and Other Developments" in Part I of the 2018 Annual Report for further information about the laws, rules and regulations and proposed laws, rules and regulations that apply to the company and its operations.

### Regulatory Matters

**Resolution Plan.** GS Group is required by the FRB and the Federal Deposit Insurance Corporation (FDIC) to submit a periodic plan that describes GS Group's strategy for a rapid and orderly resolution in the event of material financial distress or failure (resolution plan). The company is considered to be a material operating entity for the purposes of the periodic resolution plan prepared by GS Group. The FRB and the FDIC did not identify deficiencies in the 2017 resolution plan. However, they did note one shortcoming that GS Group responded to in the most recent resolution plan, which was submitted in June 2019. The company submitted the 2019 GS Group resolution plan to the Bank of England in July 2019.

### 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. As a result, the U.K. government and the E.U. have agreed to a further extension to the two-year period, with the current end date being October 31, 2019. Without a successful conclusion to the process by the end date, 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.

See "Regulatory Matters and Other Developments — Other Developments" in Part I of the 2018 Annual Report for further information about GS Group's plan to manage a hard Brexit scenario.

## Principal Risks and Uncertainties

The company faces a variety of risks that are substantial and inherent in its businesses including market, liquidity, credit, operational, model, legal, regulatory and reputational risks and uncertainties. Those risks and uncertainties are consistent with those described in the 2018 Annual Report.

## Risk Management

Risks are inherent in the company's businesses and include liquidity, market, credit, operational, model, legal, compliance, conduct, regulatory and reputational risks. For further information about the company's risk management processes, see "Risk Management — Overview and Structure of Risk Management" in Part I of the 2018 Annual Report. The company's risks include the risks across its risk categories, regions or global businesses, as well as those which have uncertain outcomes and have the potential to materially impact the company's financial results, its and its reputation. For further information about the company's areas of risk, see "Liquidity Risk Management", "Market Risk Management", "Credit Risk Management", "Operational Risk Management", "Model Risk Management" below and "Principal Risks and Uncertainties" in Part I of the 2018 Annual Report.



## Management Report

### Overview and Structure of Risk Management

#### Overview

The company believes that effective risk management is critical to its success. Accordingly, the company has 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 the risks associated with the company's business are identified, assessed, monitored and managed.

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

Together with the company's board of directors, an extensive cross-divisional committee structure with representation from senior management of the company is the key to the risk management culture throughout the company. The company's risk management structure, consistent with GS Group, is built around three core components: governance; processes; and people. See "Risk Management — Overview and Structure of Risk Management" in Part I of the 2018 Annual Report for further details.

### Liquidity Risk Management

#### Overview

Liquidity risk is the risk that the company will be unable to fund itself or meet its liquidity needs in the event of company-specific, broader industry or market liquidity stress events. The company has in place a comprehensive and conservative set of liquidity and funding policies. The company's principal objective is to be able to fund itself and to enable its core businesses to continue to serve clients and generate revenues, even under adverse circumstances. See "Risk Management — Liquidity Risk Management" in Part I of the 2018 Annual Report for further information about the company's liquidity risk management process.

**GCLA.** GCLA is liquidity that the company maintains to meet a broad range of potential cash outflows and collateral needs in a stressed environment. A primary liquidity principle is to pre-fund its estimated potential cash and collateral needs during a liquidity crisis and hold this liquidity in the form of unencumbered, highly liquid securities and cash. The company believes that the securities held in its GCLA would be readily convertible to cash in a matter of days, through liquidation, by entering into repurchase agreements or from maturities of securities purchased under agreements to resell (resale agreements), and that this cash would allow it to meet immediate obligations without needing to sell other assets or depend on additional funding from credit-sensitive markets.

The company's GCLA is distributed across asset types, issuers and clearing agents to provide sufficient operating liquidity to ensure timely settlement in all major markets, even in a difficult funding environment.

#### Stress Tests

In order to determine the appropriate size of the company's GCLA, an internal liquidity model is used, referred to as the Modeled Liquidity Outflow, which captures and quantifies the company's liquidity risks. Other factors are considered including, but not limited to, an assessment of potential intraday liquidity needs through an additional internal liquidity model, referred to as the Intraday Liquidity Model, the results of the company's long-term stress testing models, resolution liquidity models and other applicable regulatory requirements and a qualitative assessment of the condition of the company, as well as the financial markets. The results of the Modeled Liquidity Outflow, the Intraday Liquidity Model and the long-term stress testing models are reported to senior management on a regular basis. See "Risk Management — Liquidity Risk Management" in Part I of the 2018 Annual Report for further information about company-wide stress tests.

#### GCLA

Based on the results of the company's internal liquidity risk models described above, as well as consideration of other factors, including, but not limited to, a qualitative assessment of the condition of the company, as well as the financial markets, the company believes its liquidity position as of both May 2019 and November 2018 was appropriate. The company strictly limits its GCLA to a narrowly defined list of securities and cash because they are highly liquid, even in a difficult funding environment. The company does not include other potential sources of excess liquidity, such as less liquid unencumbered securities or committed credit facilities, in the GCLA.

## Management Report

The table below presents information about the company's GCLA by asset class.

\$ in millions	Average for the Three Months Ended	
	May 2019	February 2019
Overnight cash deposits	\$10,571	\$22,356
U.S. government obligations	16,655	26,964
U.K. government obligations	12,988	6,870
French government obligations	8,177	4,753
German government obligations	7,753	5,475
Japanese government obligations	2,340	2,310
<b>Total</b>	<b>\$58,484</b>	<b>\$68,728</b>

The minimum GCLA required is held by the company directly and is intended for use only by the company to meet its liquidity requirements and is assumed not to be available to Group Inc. or Funding IHC. In addition to GCLA held in the company, GS Group holds a portion of global GCLA directly at Group Inc. or Funding IHC, which in some circumstances may be additionally provided to the company or other major subsidiaries.

### Liquidity Regulatory Framework

The implementation of the Basel Committee's international framework for liquidity risk management, standards and monitoring calls for a liquidity coverage ratio (LCR) and a net stable funding ratio (NSFR).

The company is subject to a minimum LCR of 100% under the LCR rule approved by the U.K. regulatory authorities and the European Commission. The company's average monthly LCR for the trailing twelve-month period ended May 2019 exceeded the minimum requirement.

The NSFR is designed to promote medium- and long-term stable funding of the assets and off-balance-sheet activities of banking organisations over a one-year time horizon. In June 2019, the European Commission finalised rules amending the CRR to implement the NSFR for certain E.U. financial institutions, including the company. The NSFR is expected to become effective for the company on June 28, 2021. The company expects that it will be compliant with the NSFR requirement when it is effective.

The implementation of these rules, and any amendments adopted by the regulatory authorities, could impact the company's liquidity and funding requirements and practices in the future.

### Credit Ratings

The company relies on the debt capital markets to fund a portion of its day-to-day operations and the cost and availability of debt financing is influenced by its credit rating and that of Group Inc. Credit ratings are also important when the company is competing in certain markets, such as OTC derivatives, and when it seeks to engage in longer-term transactions. See "Principal Risks and Uncertainties — Liquidity" in Part I of the 2018 Annual Report for information about the risks associated with a reduction in the company's and/or Group Inc.'s credit ratings.

The table below presents the unsecured credit ratings and outlook of the company and Group Inc. by Fitch, Inc. (Fitch), Moody's Investors Service (Moody's) and Standard & Poor's Ratings Services (S&P).

	As of May 2019		
	Fitch	Moody's	S&P
<b>GSI</b>			
Short-term debt	F1	P-1	A-1
Long-term debt	A	A1	A+
Ratings outlook	Stable	Stable	Stable
<b>Group Inc.</b>			
Short-term debt	F1	P-2	A-2
Long-term debt	A	A3	BBB+
Subordinated debt	A-	Baa2	BBB-
Trust preferred	BBB-	Baa3	BB
Preferred stock	BB+	Ba1	BB
Ratings outlook	Stable	Stable	Stable

In May 2019, Moody's changed the company's ratings outlook from negative to stable.

Certain of the company's derivatives have been transacted under bilateral agreements with counterparties who may require the company to post collateral or terminate the transactions based on changes in the credit ratings of either the company and/or Group Inc. The company assesses the impact of these bilateral agreements by determining the collateral or termination payments that would occur assuming a downgrade by all rating agencies of both Group Inc. and the company's simultaneously and of each entity individually.

The table below presents the additional collateral or termination payments related to the company's net derivative liabilities under bilateral agreements that could have been called by counterparties in the event of a one-notch and two-notch downgrade in Group Inc.'s and/or the company's credit ratings.

\$ in millions	As of	
	May 2019	November 2018
Additional collateral or termination payments:		
One-notch downgrade	\$146	\$ 96
Two-notch downgrade	\$455	\$252

## Management Report

### Market Risk Management

#### Overview

Market risk is the risk of loss in the value of the company's inventory, as well as certain other financial assets and financial liabilities, due to changes in market conditions. The company employs a variety of risk measures, each described in the respective sections below, to monitor market risk. 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 and metals.

See "Risk Management — Market Risk Management" in Part I of the 2018 Annual Report for further information about the company's market risk management process.

**Value-at-Risk.** 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. A one-day time horizon with a 95% confidence level is typically employed. The VaR model is a single model that 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 across the company. See "Risk Management — Market Risk Management" in Part I of the 2018 Annual Report for further details.

#### Metrics

VaR is analysed at the company level and a variety of more detailed levels, including by risk category and business. 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 the company's average daily VaR by risk category.

\$ in millions	Three Months Ended			Six Months Ended	
	May 2019	February 2019	June 2018	May 2019	June 2018
Interest rates	\$ 22	\$ 24	\$ 22	\$ 23	\$ 23
Equity prices	17	21	20	19	20
Currency rates	7	8	10	8	10
Commodity prices	1	1	1	1	1
Diversification effect	(17)	(21)	(21)	(20)	(21)
<b>Total</b>	<b>\$ 30</b>	<b>\$ 33</b>	<b>\$ 32</b>	<b>\$ 31</b>	<b>\$ 33</b>

The company's average daily VaR decreased to \$30 million for the three months ended May 2019 from \$33 million for the three months ended February 2019, primarily due to decreases in the equity prices and interest rates categories, partially offset by a decrease in the diversification effect. The overall decrease was primarily due to reduced exposures and lower levels of volatility.

The company's average daily VaR decreased to \$30 million for the three months ended May 2019 from \$32 million for the three months ended June 2018, primarily due to decreases in the equity prices and currency rates categories, partially offset by a decrease in the diversification effect. The overall decrease was primarily due to reduced exposures.

The company's average daily VaR decreased to \$31 million for the six months ended May 2019 from \$33 million for the six months ended June 2018, primarily due to decreases in the currency rates and equity prices categories. The overall decrease was primarily due to reduced exposures.

The table below presents the company's period-end VaR by risk category.

\$ in millions	As of		
	May 2019	February 2019	June 2018
Interest rates	\$ 22	\$ 22	\$ 25
Equity prices	17	20	23
Currency rates	5	7	8
Commodity prices	1	1	1
Diversification effect	(16)	(18)	(21)
<b>Total</b>	<b>\$ 29</b>	<b>\$ 32</b>	<b>\$ 36</b>

The company's period end VaR decreased to \$29 million as of May 2019 from \$32 million as of February 2019 primarily due to decreases in the equity prices and currency rates categories, partially offset by a decrease in the diversification effect. The overall decrease was primarily due to reduced exposures and lower levels of volatility.

## Management Report

The company's period end VaR decreased to \$29 million as of May 2019 from \$36 million as of June 2018 primarily due to decreases in the equity prices, interest rates and currency rates categories, partially offset by a decrease in the diversification effect. The overall decrease was primarily due to reduced exposures and lower levels of volatility.

The table below presents the company's high and low VaR.

\$ in millions	Three Months Ended					
	May 2019		February 2019		June 2018	
	High	Low	High	Low	High	Low
<b>Categories</b>						
Interest rates	\$34	\$18	\$27	\$20	\$25	\$19
Equity prices	\$21	\$15	\$37	\$17	\$25	\$16
Currency rates	\$16	\$4	\$12	\$5	\$20	\$6
Commodity prices	\$2	\$-	\$2	\$-	\$5	\$-
<b>Company-wide</b>						
VaR	\$41	\$25	\$46	\$28	\$38	\$29

### Sensitivity Measures

Certain portfolios and individual positions are not included in VaR because VaR is not the most appropriate risk measure for these positions.

**10% Sensitivity Measures.** The market risk for positions, accounted for at fair value, that are not included in VaR is determined by estimating the potential reduction in net revenues of a 10% decline in the value of these positions. The market risk of these positions was \$32.1 million as of May 2019, \$32.8 million as of February 2019 and \$40.5 million as of June 2018.

## 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 the company holds. The company's exposure to credit risk comes mostly from client transactions in OTC derivatives. 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 debtors. In addition, the company holds other positions that give rise to credit risk (e.g., bonds held in inventory) — 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. See "Risk Management — Credit Risk Management" in Part I of the 2018 Annual Report for further information about the company's credit risk management process.

### Credit Exposures

The company's credit exposures are described further below.

**Financial Instruments Owned.** Financial instruments owned includes cash instruments and derivatives. In the table below cash instruments are included in the gross exposure; however, to the extent that they have been captured by market risk they are removed to arrive at net credit exposure. Derivatives are reported at fair value on a gross by counterparty basis in the company's financial statements unless it has a current legal right of set-off and also intends to settle on a net basis. OTC derivatives are risk managed using the risk processes, measures and limits described above, and in more detail in "Risk Management — Credit Risk Management" in Part I of the 2018 Annual Report.

**Collateralised Agreements.** The company bears credit risk related to collateralised agreements only to the extent that cash advanced to the counterparty exceeds the value of the collateral received. The company's credit exposure on these transactions is therefore significantly lower than the amounts recorded in the balance sheet, which represent fair values or contractual value before consideration of collateral received. The company also has credit exposure on collateralised financings, which are liabilities on its balance sheet, to the extent that the value of collateral pledged to the counterparty for these transactions exceeds the amount of cash or collateral received.

**Debtors.** The company is exposed to credit risk from its debtors through its amounts due from broker/dealers and customers; and amounts due from parent and group undertakings. These primarily consist of receivables related to cash collateral paid to counterparties and clearing organisations in respect of derivative financial instrument liabilities. Debtors also includes collateralised receivables related to customer securities transactions, which generally have minimal credit risk due to both the value of the collateral received and the short-term nature of these receivables.

**Cash at Bank and in Hand.** Cash at bank and in hand include both interest-bearing and non-interest-bearing deposits. To mitigate the risk of credit loss, the company places substantially all of its deposits with highly-rated banks and central banks.

The tables below present the company's gross credit exposure to financial assets and net credit exposure after taking account of assets captured by market risk in the company's risk management process, counterparty netting (i.e., the netting of financial assets and financial liabilities for a given counterparty when a legal right of set-off exists under an enforceable netting agreement), and cash and security collateral received and cash collateral posted under credit support agreements, which management considers when determining credit risk.

## Management Report

The table below presents a summary of the company's gross credit exposure and net credit exposure by financial asset class.

\$ in millions	Financial instruments		Cash at bank and in hand	Debtors	Total
	owned	Collateralised agreements			
<b>As of May 2019</b>					
Gross credit exposure	\$ 701,622	\$ 169,985	\$ 69,392	\$ 15,786	\$ 956,785
Assets captured by market risk	(94,624)	-	-	-	(94,624)
Counterparty netting	(531,238)	(65,476)	(3,953)	-	(600,667)
Cash collateral	(37,876)	-	(38,394)	-	(76,270)
Security collateral received	(14,671)	(102,099)	(7,406)	-	(124,176)
<b>Net credit exposure</b>	<b>\$ 23,213</b>	<b>\$ 2,410</b>	<b>\$ 19,639</b>	<b>\$ 15,786</b>	<b>\$ 61,048</b>

### As of November 2018

Gross credit exposure	\$ 594,129	\$ 203,334	\$ 64,487	\$ 24,396	\$ 886,346
Assets captured by market risk	(76,093)	-	-	-	(76,093)
Counterparty netting	(449,860)	(83,336)	(5,450)	-	(538,646)
Cash collateral	(35,148)	-	(32,439)	-	(67,587)
Security collateral received	(14,459)	(116,837)	(7,415)	-	(138,711)
<b>Net credit exposure</b>	<b>\$ 18,569</b>	<b>\$ 3,161</b>	<b>\$ 19,183</b>	<b>\$ 24,396</b>	<b>\$ 65,309</b>

The tables below presents the company's gross credit exposure and net credit exposure by the company's internally determined public rating agency equivalents.

\$ in millions	Investment-Grade	Non-Investment-Grade / Unrated	Total
<b>As of May 2019</b>			
Gross credit exposure	\$ 811,048	\$ 145,737	\$ 956,785
Assets captured by market risk	-	(94,624)	(94,624)
Counterparty netting	(583,459)	(17,208)	(600,667)
Cash collateral	(67,620)	(8,650)	(76,270)
Security collateral received	(105,713)	(18,463)	(124,176)
<b>Net credit exposure</b>	<b>\$ 54,256</b>	<b>\$ 6,792</b>	<b>\$ 61,048</b>

### As of November 2018

Gross credit exposure	\$ 762,094	\$ 124,252	\$ 886,346
Assets captured by market risk	-	(76,093)	(76,093)
Counterparty netting	(522,194)	(16,452)	(538,646)
Cash collateral	(59,579)	(8,008)	(67,587)
Security collateral received	(122,421)	(16,290)	(138,711)
<b>Net credit exposure</b>	<b>\$ 57,900</b>	<b>\$ 7,409</b>	<b>\$ 65,309</b>

\$ in millions	Investment-Grade				Total
	AAA	AA	A	BBB	
<b>As of May 2019</b>					
Gross credit exposure	\$ 21,439	\$ 83,363	\$ 617,408	\$ 88,838	\$ 811,048
Counterparty netting	(3,058)	(35,552)	(501,623)	(43,226)	(583,459)
Cash collateral	(7,250)	(11,823)	(32,952)	(15,595)	(67,620)
Security collateral received	(772)	(23,724)	(63,669)	(17,548)	(105,713)
<b>Net credit exposure</b>	<b>\$ 10,359</b>	<b>\$ 12,264</b>	<b>\$ 19,164</b>	<b>\$ 12,469</b>	<b>\$ 54,256</b>
<b>As of November 2018</b>					
Gross credit exposure	\$ 28,353	\$ 78,956	\$ 561,437	\$ 93,348	\$ 762,094
Counterparty netting	(2,630)	(33,438)	(439,612)	(46,514)	(522,194)
Cash collateral	(6,305)	(10,846)	(25,695)	(16,733)	(59,579)
Security collateral received	(746)	(22,588)	(78,793)	(20,294)	(122,421)
<b>Net credit exposure</b>	<b>\$ 18,672</b>	<b>\$ 12,084</b>	<b>\$ 17,337</b>	<b>\$ 9,807</b>	<b>\$ 57,900</b>

\$ in millions	Non-Investment-Grade / Unrated		
	BB or lower	Unrated	Total
<b>As of May 2019</b>			
Gross credit exposure	\$ 49,659	\$ 96,078	\$ 145,737
Assets captured by market risk	-	(94,624)	(94,624)
Counterparty netting	(17,192)	(16)	(17,208)
Cash collateral	(8,632)	(18)	(8,650)
Security collateral received	(18,337)	(126)	(18,463)
<b>Net credit exposure</b>	<b>\$ 5,498</b>	<b>\$ 1,294</b>	<b>\$ 6,792</b>

### As of November 2018

Gross credit exposure	\$ 46,412	\$ 77,840	\$ 124,252
Assets captured by market risk	-	(76,093)	(76,093)
Counterparty netting	(16,423)	(29)	(16,452)
Cash collateral	(7,993)	(15)	(8,008)
Security collateral received	(16,158)	(132)	(16,290)
<b>Net credit exposure</b>	<b>\$ 5,838</b>	<b>\$ 1,571</b>	<b>\$ 7,409</b>

In the table above, the unrated net credit exposure of \$1.29 billion as of May 2019 and \$1.57 billion as of November 2018 related to financial assets for which the company has not assigned an internally determined public rating agency equivalent.

## Impairment

The company's financial assets measured at amortised cost were \$139.57 billion as of May 2019 and \$144.66 billion as of November 2018, which are all classified within stage 1 of the company's impairment model, namely, they were not credit impaired on initial recognition and there has been no significant increase in credit risk since initial recognition. The expected credit losses on these financial instruments were not material as of both May 2019 and November 2018. There have been no significant changes in estimation techniques or significant assumptions made during the reporting period.

## Management Report

### 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. Exposure to operational risk arises from routine processing errors, as well as extraordinary incidents, such as major systems failures or legal and regulatory matters.

See “Risk Management — Operational Risk Management” in Part I of the 2018 Annual Report for further information about the company’s operational risk management process.

### 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. GS Group relies on quantitative models across its business activities primarily to value certain financial assets and financial liabilities, to monitor and manage its risk, and to measure and monitor its regulatory capital.

See “Risk Management — Model Risk Management” in Part I of the 2018 Annual Report for further information about the company’s model risk management process.

### Directors

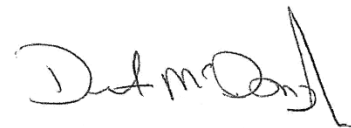
S. S. Kilsby resigned from the board of directors on December 31, 2018.

C. G. Cripps was appointed to the board of directors on April 1, 2019.

There were no other changes in the directorship of the company between the date of issue of this financial report and the 2018 Annual Report.

### Responsibility Statement

The financial statements have been prepared in accordance with FRS 104 ‘Interim Financial Reporting’ and the interim management report herein includes a fair review of the information required by 4.2.7R of the FCA’s Disclosure and Transparency Rules.



**D. W. McDonogh**  
Director  
August 13, 2019

## Unaudited Financial Statements

GOLDMAN SACHS INTERNATIONAL (UNLIMITED COMPANY)

### Profit and Loss Account (Unaudited)

<i>\$ in millions</i>	Note	Three Months Ended		Six Months Ended	
		May 2019	June 2018	May 2019	June 2018
Net revenues	4, 5	\$ 2,359	\$ 2,146	\$ 4,050	\$ 4,546
Administrative expenses		(1,446)	(1,248)	(2,734)	(2,852)
<b>Operating profit</b>		<b>913</b>	898	<b>1,316</b>	1,694
Interest payable and similar expenses		(64)	(64)	(129)	(125)
Net finance income		3	3	6	5
<b>Profit before taxation</b>		<b>852</b>	837	<b>1,193</b>	1,574
Tax on profit	6	(166)	(204)	(278)	(402)
<b>Profit for the financial period</b>		<b>\$ 686</b>	\$ 633	<b>\$ 915</b>	\$ 1,172

Net revenues and operating profit of the company are derived from continuing operations in the current and prior periods.

### Statements of Comprehensive Income (Unaudited)

<i>\$ in millions</i>	Note	Three Months Ended		Six Months Ended	
		May 2019	June 2018	May 2019	June 2018
Profit for the financial period		\$ 686	\$ 633	\$ 915	\$ 1,172
<b>Other comprehensive income</b>					
<b>Items that will not be reclassified subsequently to profit or loss</b>					
Actuarial profit/(loss) relating to the pension scheme		82	(60)	21	(13)
Debt valuation adjustment	11	38	204	(77)	308
U.K. deferred tax attributable to the components of other comprehensive income		(30)	(39)	14	(78)
<b>Other comprehensive income/(loss) for the financial period, net of tax</b>		<b>90</b>	105	<b>(42)</b>	217
<b>Total comprehensive income for the financial period</b>		<b>\$ 776</b>	\$ 738	<b>\$ 873</b>	\$ 1,389

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

## Balance Sheet (Unaudited)

<i>\$ in millions</i>	Note	As of	
		May 2019	November 2018
<b>Fixed assets</b>		<b>\$ 378</b>	<b>\$ 315</b>
<b>Current assets</b>			
Financial instruments owned (includes <b>\$26,286</b> and \$20,550 pledged as collateral)	7	<b>701,622</b>	594,129
Collateralised agreements	8	<b>169,985</b>	203,334
Debtors	9	<b>69,702</b>	64,793
Cash at bank and in hand		<b>15,786</b>	24,396
		<b>957,095</b>	886,652
<b>Creditors: amounts falling due within one year</b>			
Financial instruments sold, but not yet purchased	7	<b>(635,947)</b>	(545,987)
Collateralised financings	10	<b>(118,723)</b>	(141,840)
Other creditors	11	<b>(90,300)</b>	(97,151)
		<b>(844,970)</b>	(784,978)
<b>Net current assets</b>		<b>112,125</b>	101,674
<b>Total assets less current liabilities</b>		<b>112,503</b>	101,989
<b>Creditors: amounts falling due after more than one year</b>			
Collateralised financings	10	<b>(8,573)</b>	(10,305)
Other creditors	11	<b>(69,199)</b>	(58,095)
		<b>(77,772)</b>	(68,400)
<b>Provisions for liabilities</b>	12	<b>(30)</b>	(78)
<b>Net assets excluding pension surplus</b>		<b>34,701</b>	33,511
Pension surplus		<b>429</b>	406
<b>Net assets including pension surplus</b>		<b>\$ 35,130</b>	<b>\$ 33,917</b>
<b>Capital and reserves</b>			
Called up share capital	13	<b>\$ 590</b>	\$ 582
Share premium account		<b>5,196</b>	4,864
Profit and loss account		<b>20,985</b>	20,070
Accumulated other comprehensive income		<b>59</b>	101
Other equity instruments	14	<b>8,300</b>	8,300
<b>Total shareholder's funds</b>		<b>\$ 35,130</b>	<b>\$ 33,917</b>



## Statements of Changes in Equity (Unaudited)

<i>\$ in millions</i>	Note	Six Months Ended	
		May 2019	June 2018
<b>Called up share capital</b>			
Beginning balance		\$ 582	\$ 582
Shares issued	13	8	17
Shares cancelled	13	–	(17)
Ending balance		<b>590</b>	582
<b>Share premium account</b>			
Beginning balance		4,864	4,864
Shares issued	13	332	–
Ending balance		<b>5,196</b>	4,864
<b>Capital reserve (non-distributable)</b>			
Beginning balance		–	17
Subscription for shares	13	–	(17)
Ending balance		–	–
<b>Profit and loss account</b>			
Beginning balance		20,070	20,727
Cumulative effect on retained earnings due to adoption of IFRS 15, net of tax		–	(5)
Profit for the financial period		915	1,172
Cancellation of shares	13	–	17
Share-based payments		371	347
Management recharge related to share-based payments		(371)	(347)
Ending balance		<b>20,985</b>	21,911
<b>Accumulated other comprehensive income</b>			
Beginning balance		101	(289)
Other comprehensive income/(loss)		(42)	217
Ending balance		<b>59</b>	(72)
<b>Other equity instruments</b>			
Beginning balance		8,300	5,800
Ending balance		<b>8,300</b>	5,800
<b>Total shareholder's funds</b>		<b>\$35,130</b>	\$33,085

No dividends were paid for both the six months ended May 2019 and June 2018.

## Statements of Cash Flows (Unaudited)

<i>\$ in millions</i>	Note	Six Months Ended	
		May 2019	June 2018
<b>Cash flows from operating activities</b>			
Cash generated from/(used in) operations	16	\$ (8,762)	\$17,983
Taxation received		3	1
Taxation paid		(124)	(85)
Net cash from/(used in) operating activities		<b>(8,883)</b>	17,899
<b>Cash flows from investing activities</b>			
Capital expenditure for fixed assets		(120)	(89)
Net cash used in investing activities		<b>(120)</b>	(89)
<b>Cash flows from financing activities</b>			
Receipts from issuing ordinary share capital	13	340	–
Interest paid on long-term subordinated loans		(259)	(29)
Net cash from/(used in) financing activities		<b>81</b>	(29)
Net increase/(decrease) in cash and cash equivalents		<b>(8,922)</b>	17,781
Cash and cash equivalents, beginning balance		<b>24,243</b>	20,654
Foreign exchange losses on cash and cash equivalents		(125)	(887)
<b>Cash and cash equivalents, ending balance</b>	15	<b>\$15,196</b>	\$37,548

See Note 13 for information about non-cash activities.

## Notes to the Financial Statements (Unaudited)

### Note 1.

#### General Information

The company is a private unlimited company and is incorporated and domiciled in England and Wales. The address of its registered office is Peterborough Court, 133 Fleet Street, London, EC4A 2BB, United Kingdom.

The company's immediate parent undertaking and the parent company of the smallest group for which consolidated financial statements are prepared is Goldman Sachs Group UK Limited (GSG UK), a company incorporated and domiciled in England and Wales. Copies of its consolidated financial statements are available on request from the Company Secretary, GSG UK, Peterborough Court, 133 Fleet Street, London EC4A 2BB, United Kingdom. GSG UK together with its consolidated subsidiaries forms "GSG UK Group".

The ultimate controlling undertaking and the parent company of the largest group for which consolidated financial statements are prepared is The Goldman Sachs Group, Inc., a company incorporated in the United States of America. Copies of its consolidated financial statements, as well as certain regulatory filings, for example Quarterly Reports on Form 10-Q and the Annual Report on Form 10-K, that provide further information about GS Group and its business activities, can be obtained from Investor Relations, 200 West Street, New York, NY 10282, United States of America, GS Group's principal place of business, or at [www.goldmansachs.com/shareholders](http://www.goldmansachs.com/shareholders).

### Note 2.

#### Summary of Significant Accounting Policies

##### Basis of Preparation

The company prepares financial statements under U.K. GAAP. These financial statements have been prepared in accordance with FRS 104 'Interim Financial Reporting' (FRS 104). These financial statements should be read in conjunction with the 2018 Annual Report, which has been prepared in accordance with FRS 101 'Reduced Disclosure Framework'.

##### Accounting Policies

The accounting policies and applicable disclosure exemptions applied are consistent with those described in the 2018 Annual Report.

##### Presentation Changes

The company retrospectively changed the presentation of its interest income and interest expense in its 2018 Annual Report to reclassify negative interest income to interest expense and negative interest expense to interest income for certain instruments. As a result, where relevant, comparatives in Note 16 for the six months ended June 2018 have been updated to reflect this change.

### Note 3.

#### Critical Accounting Estimates and Judgements

The critical accounting estimates and judgements are consistent with those described in the 2018 Annual Report with the exception of the below.

##### Estimated Year-End Discretionary Compensation

A substantial portion of the company's compensation and benefits represents discretionary compensation, which is finalised at GS Group's year-end. The company believes the most appropriate way to allocate estimated annual discretionary compensation among interim periods is in proportion to the net revenues earned in such periods.

### Note 4.

#### Net Revenues

Net revenues include net interest income and non-interest income. Net interest income includes interest and dividends on financial assets and financial liabilities measured at fair value and amortised cost. Non-interest income primarily includes:

- Gains and losses on financial assets and financial liabilities mandatorily measured at fair value through profit or loss (including financial liabilities held for trading) primarily relates to non-interest gains and losses on financial instruments owned and financial instruments sold, but not yet purchased. This also includes gains and losses on certain collateralised agreements from January 1, 2018 that are measured mandatorily at fair value through profit or loss under IFRS 9.
- Gains and losses on financial assets and financial liabilities designated at fair value through profit or loss primarily relates to non-interest gains and losses on certain other creditors and collateralised financings. This also includes gains and losses on certain collateralised agreements prior to January 1, 2018 that were designated at fair value through profit or loss under IAS 39.
- Fees and commissions primarily includes net revenues from certain financial advisory and underwriting engagements, executing and clearing client transactions and certain investment management services.

## Notes to the Financial Statements (Unaudited)

The table below presents the company's net revenues.

	Three Months Ended		Six Months Ended	
	May 2019	June 2018	May 2019	June 2018
<i>\$ in millions</i>				
<b>Interest income</b>				
Interest income from external counterparties	\$ 1,845	\$ 1,501	\$ 3,343	\$ 2,831
Interest income from parent and group undertakings	504	409	989	719
<b>Total interest income</b>	<b>2,349</b>	<b>1,910</b>	<b>4,332</b>	<b>3,550</b>
<b>Interest expense</b>				
Interest expense from external Counterparties	(878)	(1,081)	(1,736)	(1,816)
Interest expense from parent and group undertakings	(1,331)	(933)	(2,554)	(1,725)
<b>Total interest expense</b>	<b>(2,209)</b>	<b>(2,014)</b>	<b>(4,290)</b>	<b>(3,541)</b>
<b>Net interest income/(expense)</b>	<b>140</b>	<b>(104)</b>	<b>42</b>	<b>9</b>
Financial asset and financial liabilities at fair value through profit or loss	1,584	1,357	3,631	2,382
Financial assets and financial liabilities designated at fair value through profit or loss	262	408	(526)	1,195
Fees and commissions	364	475	896	954
Other	9	10	7	6
<b>Non-interest income</b>	<b>2,219</b>	<b>2,250</b>	<b>4,008</b>	<b>4,537</b>
<b>Net revenues</b>	<b>\$ 2,359</b>	<b>\$ 2,146</b>	<b>\$ 4,050</b>	<b>\$ 4,546</b>

In the table above:

- Interest income included income from financial assets and financial liabilities measured at amortised cost of \$741 million for the three months ended May 2019, \$885 million for the three months ended June 2018, \$1.38 billion for the six months ended May 2019 and \$1.49 billion for the six months ended June 2018.
- Interest expense included expenses from financial assets and financial liabilities measured at amortised cost of \$933 million for the three months ended May 2019, \$1.08 billion for the three months ended June 2018, \$1.86 billion for the six months ended May 2019 and \$1.99 billion for the six months ended June 2018.
- Financial assets and financial liabilities designated at fair value through profit or loss are frequently economically hedged with financial assets and financial liabilities measured mandatorily at fair value through profit or loss. Accordingly, gains or losses that are reported in financial assets and financial liabilities designated at fair value through profit or loss can be partially offset by gains or losses reported in financial assets and financial liabilities measured mandatorily at fair value through profit or loss.

### Note 5.

## Segment Reporting

The company reports its activities in the following four business segments: Investment Banking; Institutional Client Services; Investing & Lending; and Investment Management. See "Results of Operations — Segment Reporting" in Part I of this financial report for a description of the company's segments.

### Basis of Preparation

The basis of preparation of the company's segment reporting is consistent with that described in the 2018 Annual Report.

### Segment Net Revenues

See "Results of Operations — Segment Reporting" in Part I of this financial report for the company's segment net revenues.

### Segment Operating Profit

The table below presents the operating profit of the company's significant segments.

	Three Months Ended		Six Months Ended	
	May 2019	June 2018	May 2019	June 2018
<i>\$ in millions</i>				
<b>Investment Banking</b>				
Net revenues	\$ 345	\$ 390	\$ 684	\$ 778
Administrative expenses	(270)	(308)	(520)	(679)
<b>Operating profit</b>	<b>\$ 75</b>	<b>\$ 82</b>	<b>\$ 164</b>	<b>\$ 99</b>
<b>Institutional Client Services</b>				
Net revenues	\$ 1,719	\$ 1,366	\$ 2,877	\$ 3,007
Administrative expenses	(1,011)	(820)	(1,829)	(1,781)
<b>Operating profit</b>	<b>\$ 708</b>	<b>\$ 546</b>	<b>\$ 1,048</b>	<b>\$ 1,226</b>
<b>Total net revenues</b>	<b>\$ 2,359</b>	<b>\$ 2,146</b>	<b>\$ 4,050</b>	<b>\$ 4,546</b>
<b>Total administrative expenses</b>	<b>(1,446)</b>	<b>(1,248)</b>	<b>(2,734)</b>	<b>(2,852)</b>
<b>Total operating profit</b>	<b>\$ 913</b>	<b>\$ 898</b>	<b>\$ 1,316</b>	<b>\$ 1,694</b>

In the table above:

- Total net revenues included net revenues related to Investing & Lending and Investment Management segments of \$295 million for the three months ended May 2019, \$390 million for the three months ended June 2018, \$489 million for the six months ended May 2019 and \$761 million for the six months ended June 2018.
- Total administrative expenses included administrative expenses related to Investing & Lending and Investment Management segments of \$221 million for the three months ended May 2019, \$241 million for the three months ended June 2018, \$384 million for the six months ended May 2019 and \$455 million for the six months ended June 2018.

## Notes to the Financial Statements (Unaudited)

- Total administrative expenses included a credit of \$56 million for the three months ended May 2019, a credit of \$121 million for the three months ended June 2018, a charge of \$1 million for the six months ended May 2019 and a credit of \$63 million for the six months ended June 2018 relating to the mark-to-market of share-based compensation that has not been allocated to the company's segments.

### Segment Assets

Substantially all of the company's assets are attributable to Institutional Client Services.

### Note 6.

#### Tax on Profit

The table below presents an analysis of the company's tax on profit.

<i>\$ in millions</i>	Three Months Ended		Six Months Ended	
	May	June	May	June
	2019	2018	2019	2018
<b>Current tax</b>				
U.K. taxation	\$112	\$164	\$113	\$192
Adjustment in respect of prior periods	–	–	(1)	–
Overseas taxation	74	44	89	61
<b>Total current tax</b>	<b>186</b>	<b>208</b>	<b>201</b>	<b>253</b>
<b>Deferred tax</b>				
Origination and reversal of temporary differences	(19)	(4)	75	–
Adjustment in respect of prior periods	(1)	–	2	149
<b>Total deferred tax</b>	<b>(20)</b>	<b>(4)</b>	<b>77</b>	<b>149</b>
<b>Total tax on profit</b>	<b>\$166</b>	<b>\$204</b>	<b>\$278</b>	<b>\$402</b>

### Note 7.

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

Financial instruments owned and financial instruments sold, but not yet purchased comprise financial instruments and investments within the operating activities of the company. Financial instruments owned includes financial instruments owned pledged as collateral.

The table below presents financial instruments owned.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
<b>Cash instruments</b>		
Money market instruments	\$ 528	\$ 428
Government and agency obligations	38,486	33,516
Mortgage and other asset-backed loans and securities	362	485
Corporate debt instruments	15,410	16,482
Equity securities	44,271	30,567
Commodities	141	88
<b>Total cash instruments</b>	<b>99,198</b>	<b>81,566</b>
<b>Derivative instruments</b>		
Interest rates	408,682	294,986
Credit	28,876	28,463
Currencies	99,479	111,791
Commodities	10,229	12,644
Equities	55,158	64,679
<b>Total derivative instruments</b>	<b>602,424</b>	<b>512,563</b>
<b>Total financial instruments owned</b>	<b>\$701,622</b>	<b>\$594,129</b>

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

<i>\$ in millions</i>	As of	
	May 2019	November 2018
<b>Cash instruments</b>		
Government and agency obligations	\$ 19,554	\$ 21,700
Corporate debt instruments	3,337	3,486
Equity securities	21,577	22,412
Commodities	12	2
<b>Total cash instruments</b>	<b>44,480</b>	<b>47,600</b>
<b>Derivative instruments</b>		
Interest rates	401,448	287,789
Credit	27,144	26,080
Currencies	99,071	111,863
Commodities	10,193	12,758
Equities	53,611	59,897
<b>Total derivative instruments</b>	<b>591,467</b>	<b>498,387</b>
<b>Total financial instruments sold, but not yet purchased</b>	<b>\$635,947</b>	<b>\$545,987</b>

In the tables above:

- Corporate debt instruments includes corporate loans, debt securities and other debt obligations.
- Equity securities includes public and private equities, exchange-traded funds and convertible debentures.

## Notes to the Financial Statements (Unaudited)

### Note 8.

#### Collateralised Agreements

The table below presents collateralised agreements.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
Resale agreements	\$ 98,904	\$127,474
Securities borrowed	71,081	75,860
<b>Total collateralised agreements</b>	<b>\$169,985</b>	<b>\$203,334</b>

In the table above:

- Total collateralised agreements included amounts due from group undertakings of \$99.91 billion as of May 2019 and \$129.75 billion as of November 2018.
- Total collateralised agreements included balances due in more than one year of \$1.88 billion as of May 2019 and \$1.16 billion as of November 2018.

### Note 9.

#### Debtors

The table below presents debtors balances.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
Amounts due from broker/dealers and customers	\$55,595	\$52,084
Amounts due from parent and group undertakings	13,786	12,391
Deferred tax	193	256
Other debtors	82	29
Prepayments and accrued income	46	33
<b>Total debtors</b>	<b>\$69,702</b>	<b>\$64,793</b>

In the table above:

- Amounts due from parent and group undertakings included balances due in more than one year relating to intercompany loans of \$548 million as of May 2019 and \$134 million as of November 2018. All other debtors are due within one year of the balance sheet date.
- Amounts due from broker/dealers and customers and amounts due from parent and group undertakings included receivables from contracts with clients of \$168 million as of May 2019 and \$338 million as of November 2018.
- Total debtors included financial assets of \$69.39 billion as of May 2019 and \$64.49 billion as of November 2018, and non-financial assets of \$310 million as of May 2019 and \$306 million as of November 2018.

### Note 10.

#### Collateralised Financings

The table below presents collateralised financings.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
<b>Amounts falling due within one year</b>		
Repurchase agreements	\$ 60,653	\$ 79,521
Securities loaned	53,001	56,122
Intercompany loans	106	–
Debt securities issued	1,761	2,672
Other borrowings	3,202	3,525
<b>Total</b>	<b>\$118,723</b>	<b>\$141,840</b>
<b>Amounts falling due after more than one year</b>		
Repurchase agreements	\$ 3,487	\$ 5,709
Securities loaned	–	227
Intercompany loans	399	–
Debt securities issued	150	261
Other borrowings	4,537	4,108
<b>Total</b>	<b>\$ 8,573</b>	<b>\$ 10,305</b>
<b>Total collateralised financings</b>	<b>\$127,296</b>	<b>\$152,145</b>

In the table above:

- Repurchase agreements falling due after more than one year included instruments that are repayable in more than five years of \$75 million as of May 2019 and \$74 million as of November 2018 which had maturities falling due in 2030.
- Debt securities issued and other borrowings falling due after more than one year included instruments that are repayable in more than five years of \$2.19 billion as of May 2019 and \$2.21 billion as of November 2018. As of May 2019, these instruments have maturities falling due between 2024 and 2050. Payments on these instruments are typically referenced to underlying financial assets, which are predominately equities and credit-related.
- Total collateralised financings included amounts due to group undertakings of \$85.41 billion as of May 2019 and \$98.80 billion as of November 2018 of which \$82.83 billion as of May 2019 and \$95.90 billion as of November 2018 are due within one year.
- Debt securities issued and other borrowings are secured by securities which have been pledged as collateral. This pledged collateral is either recognised within “Financial instruments owned” or sourced through collateralised agreements.

## Notes to the Financial Statements (Unaudited)

### Intercompany Loans

Intercompany loans due within one year as of May 2019 increased compared with November 2018, reflecting an increase in secured borrowings of \$106 million due to new proceeds of \$1.26 billion, partially offset by repayments of \$1.15 billion.

Intercompany loans due after one year as of May 2019 increased compared with November 2018, reflecting an increase in secured borrowings of \$399 million due to new proceeds.

#### Note 11.

### Other Creditors

The table below presents other creditors.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
<b>Amounts falling due within one year</b>		
Unsecured borrowings	\$ 20,134	\$ 29,229
Amounts due to broker/dealers and customers	54,402	53,647
Amounts due to parent and group undertakings:		
Other unsecured creditors	14,103	12,465
Share-based compensation	313	418
Corporation tax payable	69	127
Other taxes and social security costs	214	338
Other creditors and accruals	1,065	927
<b>Total</b>	<b>\$ 90,300</b>	<b>\$ 97,151</b>
<b>Amounts falling due after more than one year</b>		
Unsecured borrowings	\$ 68,790	\$ 57,461
Amounts due to parent and group undertakings:		
Share-based compensation	362	575
Other creditors	47	59
<b>Total</b>	<b>\$ 69,199</b>	<b>\$ 58,095</b>
<b>Total other creditors</b>	<b>\$159,499</b>	<b>\$155,246</b>

In the table above:

- Amounts falling due within one year included financial liabilities of \$90.02 billion as of May 2019 and \$96.69 billion as of November 2018, and non-financial liabilities of \$283 million as of May 2019 and \$465 million as of November 2018.
- All amounts falling due after more than one year are financial liabilities as of both May 2019 and November 2018.

### Unsecured Borrowings

The table below presents unsecured borrowings.

<i>\$ in millions</i>	As of	
	May 2019	November 2018
<b>Intercompany</b>		
Loans	\$10,265	\$21,232
Other borrowings	847	892
<b>Short-term intercompany unsecured borrowings</b>	<b>11,112</b>	<b>22,124</b>
Loans	45,522	32,453
Subordinated loans	5,377	5,377
Other borrowings	1,376	1,539
<b>Long-term intercompany unsecured borrowings</b>	<b>52,275</b>	<b>39,369</b>
<b>Total intercompany unsecured borrowings</b>	<b>\$63,387</b>	<b>\$61,493</b>
<b>External</b>		
Bank loans	\$ 170	\$ 164
Overdrafts	590	153
Debt securities issued	7,780	6,483
Other borrowings	482	305
<b>Short-term external unsecured borrowings</b>	<b>9,022</b>	<b>7,105</b>
Bank loans	–	6
Debt securities issued	16,319	17,854
Other borrowings	196	232
<b>Long-term external unsecured borrowings</b>	<b>16,515</b>	<b>18,092</b>
<b>Total external unsecured borrowings</b>	<b>\$25,537</b>	<b>\$25,197</b>
<b>Total unsecured borrowings</b>	<b>\$88,924</b>	<b>\$86,690</b>

In the table above:

- Debt securities issued and other borrowings falling due after more than one year included instruments that are repayable in more than five years of \$10.82 billion as of May 2019 and \$10.97 billion as of November 2018. As of May 2019, these instruments have maturities falling due between 2024 and 2057. Payments on these instruments are typically referenced to underlying financial assets, which are predominately currencies, interest rates and equities-related.
- Intercompany loans falling due after more than one year included loans that are repayable in more than five years. As of May 2019, the company had variable rate loans of \$1.02 billion with maturities falling due between June 7, 2024 and April 7, 2028. As of November 2018, the company had variable rate loans of \$1.03 billion with maturities falling due between April 8, 2024 and April 7, 2028.

## Notes to the Financial Statements (Unaudited)

### Debt Valuation Adjustment

The company calculates the fair value of debt securities issued that are designated at fair value through profit or loss by discounting future cash flows at a rate which incorporates GS Group's credit spreads.

The table below presents details about the net debt valuation adjustment (DVA) gains/(losses) on such financial liabilities that are designated at fair value through profit or loss and included in debt valuation adjustment in other comprehensive income.

	Three Months Ended		Six Months Ended	
	May	June	May	June
<i>\$ in millions</i>	2019	2018	2019	2018
DVA (pre-tax)	\$38	\$204	\$(77)	\$308

The table below presents details about the cumulative net DVA gains/(losses) included in accumulated other comprehensive income.

	As of	
	May	November
<i>\$ in millions</i>	2019	2018
DVA (pre-tax)	\$(23)	\$54

### Long-Term Subordinated Loans

Long-term subordinated loans consist of long-term subordinated loans from parent and group undertakings, which are unsecured and carry interest at a margin over the U.S. Federal Reserve's Federal Funds rate. The margin is reset on a periodic basis to reflect changes in GS Group's weighted average cost of debt. Long-term subordinated loans constitute regulatory capital as approved by the PRA, subject to any regulatory capital deductions, and are repayable subject to PRA approval.

Long term subordinated loans of \$5.38 billion as of both May 2019 and November 2018 were repayable between December 26, 2024 and September 9, 2025.

### Intercompany Loans

Intercompany borrowings due within one year as of May 2019 decreased compared with November 2018, reflecting a decrease in unsecured borrowings of \$10.97 billion due to repayments of \$1.76 billion and borrowings of \$13.22 billion being extended to long-term, partially offset by new proceeds of \$4.01 billion.

Intercompany borrowings due after more than one year as of May 2019 increased compared with November 2018, reflecting an increase in unsecured borrowings of \$13.07 billion due to new proceeds of \$7.08 billion and borrowings of \$13.22 billion being extended from short-term, partially offset by repayments of \$7.23 billion.

### Note 12.

#### Provisions for Liabilities

The table below presents provisions for liabilities, which are in respect of legal and regulatory proceedings in which the company is involved.

<i>\$ in millions</i>	
As of December 1, 2018	\$ 78
Charged during the period	3
Utilised during the period	(51)
<b>As of May 31, 2019</b>	<b>\$ 30</b>

In the table above, provisions for liabilities utilised during the period included \$45 million related to a fine levied by the FCA in March 2019 relating to transaction reporting. This fine was paid in April 2019.

Further details relating to other provisions have not been disclosed as permitted by IAS 37 'Provisions, Contingent Liabilities and Contingent Assets', on the grounds that for commercial and confidentiality reasons it would be seriously prejudicial to do so.

### Note 13.

#### Share Capital

The table below presents share capital.

Allotted, called up and fully paid	Ordinary shares	
	of \$1 each	<i>\$ in millions</i>
As of December 1, 2018	581,964,161	\$582
Allotted during the period	7,643,885	8
<b>As of May 31, 2019</b>	<b>589,608,046</b>	<b>\$590</b>

On January 21, 2019, 7,643,885 ordinary shares of \$1 each were allotted at \$44.48 to GSG UK. The total consideration received was \$340,000,000 in cash, incorporating a share premium of \$332,356,115.

On May 10, 2018, in order to simplify the company's capital structure, the company allotted 17.3 million ordinary shares of \$1 each to GSG UK for nil consideration. The company subsequently cancelled 17.3 million ordinary shares for nil consideration, resulting in a reduction in the company's non-distributable capital reserve by \$17.3 million and an increase in its profit and loss account in shareholder's funds by \$17.3 million.



## Notes to the Financial Statements (Unaudited)

### Note 14.

#### Other Equity Instruments

Other equity instruments consist of 8,300 unsecured Additional Tier 1 notes (AT1 notes) of \$1 million each issued to GSG UK for a total consideration of \$8.30 billion. These were issued in two tranches: 5,800 AT1 notes were issued in June 2017 and carry a non-cumulative fixed interest rate of 9.00% per annum; and 2,500 AT1 notes were issued in November 2018 and carry a non-cumulative fixed interest rate of 8.67% per annum. The non-cumulative fixed interest is payable at the company's discretion subject to certain solvency and regulatory conditions. The AT1 notes have no fixed maturity date and are not callable.

The AT1 notes will be irrevocably written-down in the event that the CET1 ratio of the company or the GSG UK Group falls below 7%.

### Note 15.

#### Cash and Cash Equivalents

The table below presents cash and cash equivalents for the purpose of the statements of cash flows.

<i>\$ in millions</i>	As of	
	May 2019	June 2018
Cash at bank and in hand	\$15,786	\$37,638
Overdrafts (see Note 11)	(590)	(90)
<b>Total cash and cash equivalents</b>	<b>\$15,196</b>	<b>\$37,548</b>

In the table above, cash at bank and in hand included cash that is not available for use by the company of \$4.00 billion as of May 2019 and \$4.40 billion as of June 2018.

### Note 16.

#### Reconciliation of Cash Flows From Operating Activities

The table below presents reconciliation of cash flows from/(used in) operating activities.

<i>\$ in millions</i>	Six Months Ended	
	May 2019	June 2018
Profit before taxation	\$ 1,193	\$ 1,574
<b>Adjustments for:</b>		
Depreciation and amortisation	53	30
Losses on disposal of fixed assets	4	–
Credit for defined benefit plan	(6)	(5)
Foreign exchange losses	128	895
Share-based compensation expense	101	24
IFRS 15 transition adjustment	–	(7)
Provisions for liabilities	3	2
Interest payable and similar expenses	129	125
Cash generated before changes in operating assets and liabilities	<b>1,605</b>	<b>2,638</b>
<b>Changes in operating assets</b>		
Increase in financial instruments owned	(107,493)	(11,121)
Decrease/(increase) in collateralised agreements	33,349	(8,263)
Increase in debtors	(4,972)	(2,695)
Changes in operating assets	<b>(79,116)</b>	<b>(22,079)</b>
<b>Changes in operating liabilities</b>		
Increase in financial instruments sold, but not yet purchased	89,960	3,969
Increase/(decrease) in collateralised financings	(24,849)	4,081
Increase in other creditors	3,689	29,421
Decrease in provisions for liabilities	(51)	–
Changes in operating liabilities	<b>68,749</b>	<b>37,471</b>
Contributions paid to defined benefit plan	–	(47)
<b>Cash generated from/(used in) operations</b>	<b>\$ (8,762)</b>	<b>\$ 17,983</b>

In the table above, cash generated from operations included interest paid of \$3.76 billion for the six months ended May 2019 and \$3.00 billion for the six months ended June 2018, and interest received of \$3.94 billion for the six months ended May 2019 and \$2.93 billion for the six months ended June 2018. The interest paid and received for the six months ended June 2018 has been increased by \$437 million to conform to the current period's presentation. See Note 2 for further information.

## Notes to the Financial Statements (Unaudited)

### Note 17.

## Contingent Liabilities

### Legal Proceedings

The company 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 company's business, however it is not practicable to reliably estimate the financial impact, if any, of these proceedings on the company, except as disclosed in Note 12.

**1Malaysia Development Berhad (1MDB)-Related Matters.** GS Group has received subpoenas and requests for documents and information from various governmental and regulatory bodies and self-regulatory organisations as part of investigations and reviews relating to financing transactions and other matters involving 1MDB, a sovereign wealth fund in Malaysia. Subsidiaries of Group Inc., including the company, 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 GS Group, and an indictment against Ng Chong Hwa, a former managing director of GS Group, 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 GS Group. The plea and charging documents indicate that Leissner and Ng knowingly and wilfully circumvented GS Group'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 GS Group's system of internal accounting controls could be easily circumvented and that GS Group's business culture, particularly in Southeast Asia, at times prioritised 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 GS Group is alleged to have been aware of the bribery scheme and to have agreed not to disclose this information to GS Group's compliance and control personnel. That employee, who was identified as a co-conspirator, has been put on administrative leave.

On December 17, 2018, the Attorney General of Malaysia filed criminal charges in Malaysia against the company, 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 two other subsidiaries of Group Inc. 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 five current and former directors of the company, including the company's chief executive officer, and twelve current and former directors of the two other subsidiaries.

The Malaysia Securities Commission issued notices to show cause against a subsidiary of Group Inc. 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 the subsidiary's licence to conduct corporate finance and fund management activities in Malaysia.

GS Group 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, GS Group's involvement with 1MDB and its compliance procedures.

## Notes to the Financial Statements (Unaudited)

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 GS Group. 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.

Beginning in March 2019, GS Group has also received demands from alleged shareholders to investigate and pursue claims against certain current and former directors and executive officers of Group Inc. 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, New York County, 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. and a number of Group Inc.'s subsidiaries, including the company, Leissner, Ng, and an employee of GS Group, as well as individuals (who are not employees of GS Group) 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 current and former officers of GS Group alleging violations of the anti-fraud provisions of the Exchange Act with respect to Group Inc.'s disclosures concerning 1MDB and seeking unspecified damages.

GS Group is cooperating with the DOJ and all other governmental and regulatory investigations relating to 1MDB and is engaged in discussions with various governmental and regulatory authorities. Proceedings by the DOJ or other governmental or regulatory authorities could result in the imposition of significant fines, penalties and other sanctions against GS Group, including restrictions on GS Group's activities.

**Credit Default Swap Antitrust Litigation.** The company is among the defendants named in an antitrust action relating to the trading of credit default swaps filed in the U.S. District Court for the Southern District of New York on June 8, 2017 by the operator of a swap execution facility and certain of its affiliates. The complaint generally asserts claims under federal and state antitrust laws and state common law in connection with an alleged conspiracy among the defendants to preclude trading of credit default swaps on the plaintiffs' swap execution facility. The complaint seeks declaratory and injunctive relief, as well as treble damages in an unspecified amount. On July 30, 2019, the court dismissed the state common law claims against all defendants and the antitrust claims against certain defendants, including the company.

**Interest Rate Swap Antitrust Litigation.** The company is 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 company is also 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.

## Notes to the Financial Statements (Unaudited)

**Commodities-Related Litigation.** The company 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.

**Regulatory Investigations and Reviews and Related Litigation.** Group Inc. and certain of its affiliates, including the company, 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 organisations and litigation relating to various matters relating to GS Group's businesses and operations, including:

- The 2008 financial crisis;
- The public offering process;
- Investment management and financial advisory services;
- Conflicts of interest;
- Transactions involving government-related financings and other matters;
- 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 GS Group's supervision and controls relating to such activities, including compliance with applicable short sale rules, algorithmic, high-frequency and quantitative trading, futures trading, options trading, when-issued trading, transaction reporting, technology systems and controls, securities lending practices, trading and clearance of credit derivative instruments and interest rate swaps, commodities activities and metals storage, private placement practices, allocations of and trading in securities, and trading activities and communications in connection with the establishment of benchmark rates, such as currency rates;
- Compliance with the U.K. Bribery Act and the FCPA;
- Hiring and compensation practices;
- System of risk management and controls; and
- Insider trading, the potential misuse and dissemination of material non-public information regarding corporate and governmental developments and the effectiveness of insider trading controls and information barriers.

In addition, investigations, reviews and litigation involving the company's affiliates and such affiliates' businesses and operations, including various matters referred to above but also other matters, may have an impact on the company's businesses and operations.

### Note 18.

## Financial Risk Management and Capital Management

Certain disclosures in relation to the company's financial risk management and capital management have been presented alongside other risk management and regulatory information in Part I of this financial report.

## Notes to the Financial Statements (Unaudited)

### Note 19.

## Financial Assets and Financial Liabilities

### Financial Assets and Financial Liabilities by Category

The tables below present the carrying value of the company's financial assets and financial liabilities by category.

\$ in millions	Financial Assets		Total
	Mandatorily at fair value	Amortised cost	
<b>As of May 2019</b>			
Financial instruments owned	\$701,622	\$ -	\$701,622
Collateralised agreements	115,465	54,520	169,985
Debtors	130	69,262	69,392
Cash at bank and in hand	-	15,786	15,786
<b>Total financial assets</b>	<b>\$817,217</b>	<b>\$139,568</b>	<b>\$956,785</b>

<b>As of November 2018</b>			
Financial instruments owned	\$594,129	\$ -	\$594,129
Collateralised agreements	146,767	56,567	203,334
Debtors	790	63,697	64,487
Cash at bank and in hand	-	24,396	24,396
<b>Total financial assets</b>	<b>\$741,686</b>	<b>\$144,660</b>	<b>\$886,346</b>

\$ in millions	Financial Liabilities			Total
	Held for trading	Designated at fair value	Amortised cost	
<b>As of May 2019</b>				
<b>Amounts falling due within one year</b>				
Financial instruments sold, but not yet purchased	\$635,947	\$ -	\$ -	\$635,947
Collateralised financings	-	75,850	42,873	118,723
Other creditors	-	9,415	80,602	90,017
<b>Total</b>	<b>635,947</b>	<b>85,265</b>	<b>123,475</b>	<b>844,687</b>
<b>Amounts falling due after more than one year</b>				
Collateralised financings	-	8,573	-	8,573
Other creditors	-	40,857	28,342	69,199
<b>Total</b>	<b>-</b>	<b>49,430</b>	<b>28,342</b>	<b>77,772</b>
<b>Total financial liabilities</b>	<b>\$635,947</b>	<b>\$134,695</b>	<b>\$151,817</b>	<b>\$922,459</b>

<b>As of November 2018</b>				
<b>Amounts falling due within one year</b>				
Financial instruments sold, but not yet purchased	\$545,987	\$ -	\$ -	\$545,987
Collateralised financings	-	97,865	43,975	141,840
Other creditors	-	8,694	87,992	96,686
<b>Total</b>	<b>545,987</b>	<b>106,559</b>	<b>131,967</b>	<b>784,513</b>
<b>Amounts falling due after more than one year</b>				
Collateralised financings	-	10,305	-	10,305
Other creditors	-	42,236	15,859	58,095
<b>Total</b>	<b>-</b>	<b>52,541</b>	<b>15,859</b>	<b>68,400</b>
<b>Total financial liabilities</b>	<b>\$545,987</b>	<b>\$159,100</b>	<b>\$147,826</b>	<b>\$852,913</b>

In the tables above, financial instruments owned included derivative instruments designated as hedges of \$29 million as of May 2019 and \$26 million as of November 2018.

### Fair Value Hierarchy

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 company measures certain financial assets and financial liabilities as a portfolio (i.e., based on its net exposure to market and/or credit risks).

U.K. GAAP has a three-level hierarchy for disclosure of fair value measurements. This hierarchy prioritises 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 the hierarchy is based on the lowest level of input that is significant to its fair value measurement.

The fair value hierarchy is as follows:

**Level 1.** Inputs are unadjusted quoted prices in active markets to which the company 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 company's financial assets and financial liabilities that are fair valued on a recurring basis 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 company's and GS Group's credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads. Valuation adjustments are generally based on market evidence.

## Notes to the Financial Statements (Unaudited)

### Valuation Techniques and Significant Inputs

**Cash Instruments.** Cash instruments include government and agency obligations, corporate debt instruments, equity securities, and other non-derivative financial instruments owned and financial instruments sold, but not yet purchased. Valuation techniques and significant inputs for each level of the fair value hierarchy include:

#### **Level 1 Cash Instruments**

Level 1 cash instruments are valued using quoted prices for identical unrestricted instruments in active markets. The company defines active markets for equity instruments based on the average daily trading volume both in absolute terms and relative to the market capitalisation for the instrument. The company 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 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 company 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 realised on sales of financial assets.

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:

- **Mortgages and Other Asset-Backed Loans and Securities.** Significant inputs are generally determined based on relative value analyses and 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;
  - Current performance of the borrower or loan collateral and recovery assumptions if a default occurs; and
  - Timing of expected future cash flows (duration) which, in certain cases, may incorporate the impact of other unobservable inputs (e.g., prepayment speeds).
- **Corporate Debt Instruments and Government and Agency 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;
  - Current levels and changes in market indices, such as the iTraxx and CDX (indices that track the performance of corporate credit);
  - Current performance of the borrower or loan collateral and recovery assumptions if a default occurs; and
  - Maturity and coupon profile of the instrument.
- **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 and public comparables;
  - Transactions in similar instruments; and
  - Discounted cash flow techniques.

## Notes to the Financial Statements (Unaudited)

**Derivative Instruments.** 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 company's OTC derivatives are cleared and settled through central clearing counterparties (OTC-cleared), while others are bilateral contracts between two counterparties (bilateral OTC).

The company'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 characterised 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 industrialised nations are characterised 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 or to secured funding spreads, generally have less price transparency.
- **Currency.** Prices for currency derivatives based on the exchange rates of leading industrialised 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.
- **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.

### **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. In evaluating the significance of a valuation input, the company considers, among other factors, a portfolio's net risk exposure to that input.

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 judgement 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 collateralised derivatives), credit curves, measures of volatility 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.

## Notes to the Financial Statements (Unaudited)

### **Level 3 Derivatives**

Level 3 derivatives are valued using models which utilise observable level 1 and/or level 2 inputs, as well as unobservable level 3 inputs. Unobservable inputs include certain correlations, illiquid credit and secured funding spreads, recovery rates and certain equity and interest rate volatilities.

Subsequent to the initial valuation of a level 3 derivative, the company 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 company 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.

Where there is a difference between the initial transaction price and the fair value calculated by internal models, a gain or loss is recognised after initial recognition only to the extent that it arises from a change in a factor (including time) that market participants would consider in setting a price.

### **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 uncollateralised portion of derivative portfolios. The company also makes funding valuation adjustments to collateralised derivatives where the terms of the agreement do not permit the company 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 company makes model or exit price adjustments to account for the valuation uncertainty present in the transaction.

### **Other Financial Assets and Financial Liabilities.**

Valuation techniques and significant inputs of other financial assets and financial liabilities include:

- **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.
- **Debtors.** Debtors measured at fair value primarily consist of secured lending and prepaid commodity contracts. 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.
- **Other Secured Financings.** The significant inputs to the valuation of secured debt securities issued and other borrowings measured 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 company (which is determined using the amount and timing of expected future cash flows, market prices, market yields and recovery assumptions) and the frequency of additional collateral calls.
- **Other Creditors.** The significant inputs to the valuation of unsecured other creditors measured at fair value are the amount and timing of expected future cash flows, interest rates, the credit spreads of GS Group, as well as commodity prices in the case of prepaid commodity contracts. The inputs used to value the embedded derivative component of hybrid financial instruments are consistent with the inputs used to value the company's other derivative instruments.



## Notes to the Financial Statements (Unaudited)

### Fair Value of Financial Assets and Financial Liabilities by Level

The table below presents, by level within the fair value hierarchy, financial assets and financial liabilities measured at fair value on a recurring basis.

<i>\$ in millions</i>	Level 1	Level 2	Level 3	Total
<b>As of May 2019</b>				
<b>Financial Assets</b>				
Cash instruments	\$71,957	\$ 26,209	\$ 1,032	\$ 99,198
Derivative instruments	18	598,114	4,292	602,424
Financial instruments owned	71,975	624,323	5,324	701,622
Collateralised agreements	–	115,465	–	115,465
Debtors	–	130	–	130
<b>Total financial assets</b>	<b>\$71,975</b>	<b>\$739,918</b>	<b>\$ 5,324</b>	<b>\$817,217</b>
<b>Financial Liabilities</b>				
<b>Amounts falling due within one year</b>				
Cash instruments	\$39,056	\$ 5,321	\$ 103	\$ 44,480
Derivative instruments	17	589,056	2,394	591,467
Financial instruments sold, but not yet purchased	39,073	594,377	2,497	635,947
Collateralised financings	–	74,873	977	75,850
Other creditors	–	6,267	3,148	9,415
<b>Total</b>	<b>39,073</b>	<b>675,517</b>	<b>6,622</b>	<b>721,212</b>
<b>Amounts falling due after more than one year</b>				
Collateralised financings	–	8,573	–	8,573
Other creditors	–	35,122	5,735	40,857
<b>Total</b>	<b>–</b>	<b>43,695</b>	<b>5,735</b>	<b>49,430</b>
<b>Total financial liabilities</b>	<b>\$39,073</b>	<b>\$719,212</b>	<b>\$12,357</b>	<b>\$770,642</b>
<b>Net derivative instruments</b>	<b>\$ 1</b>	<b>\$ 9,058</b>	<b>\$ 1,898</b>	<b>\$ 10,957</b>

#### As of November 2018

<b>Financial Assets</b>				
Cash instruments	\$53,205	\$ 27,278	\$ 1,083	\$ 81,566
Derivative instruments	17	508,315	4,231	512,563
Financial instruments owned	53,222	535,593	5,314	594,129
Collateralised agreements	–	146,767	–	146,767
Debtors	–	790	–	790
<b>Total financial assets</b>	<b>\$53,222</b>	<b>\$683,150</b>	<b>\$ 5,314</b>	<b>\$741,686</b>
<b>Financial Liabilities</b>				
<b>Amounts falling due within one year</b>				
Cash instruments	\$42,951	\$ 4,637	\$ 12	\$ 47,600
Derivative instruments	21	495,993	2,373	498,387
Financial instruments sold, but not yet purchased	42,972	500,630	2,385	545,987
Collateralised financings	–	96,948	917	97,865
Other creditors	–	6,272	2,422	8,694
<b>Total</b>	<b>42,972</b>	<b>603,850</b>	<b>5,724</b>	<b>652,546</b>
<b>Amounts falling due after more than one year</b>				
Collateralised financings	–	10,286	19	10,305
Other creditors	–	35,105	7,131	42,236
<b>Total</b>	<b>–</b>	<b>45,391</b>	<b>7,150</b>	<b>52,541</b>
<b>Total financial liabilities</b>	<b>\$42,972</b>	<b>\$649,241</b>	<b>\$12,874</b>	<b>\$705,087</b>
<b>Net derivative instruments</b>	<b>\$ (4)</b>	<b>\$ 12,322</b>	<b>\$ 1,858</b>	<b>\$ 14,176</b>

### Significant Unobservable Inputs Used in Level 3 Fair Value Measurements

**Cash Instruments.** The company had level 3 cash instrument assets of \$1.03 billion as of May 2019 and \$1.08 billion as of November 2018. Level 3 cash instrument liabilities were not material.

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

<i>\$ in millions</i>	Level 3 Cash Instruments Assets and Range of Significant Unobservable Inputs (Weighted Average) as of	
	May 2019	November 2018
<b>Mortgages and other asset-backed loans and securities</b>		
Level 3 assets	\$136	\$171
Yield	0.6% to 17.5% (7.0%)	2.4% to 16.5% (6.5%)
Recovery rate	22.5% to 75.0% (51.9%)	19.0% to 75.0% (50.0%)
Duration (years)	0.5 to 17.6 (4.5)	0.5 to 13.4 (5.1)
<b>Corporate debt instruments and government and agency obligations</b>		
Level 3 assets	\$845	\$841
Yield	1.2% to 10.5% (4.5%)	0.7% to 10.5% (5.2%)
Recovery rate	0.0% to 70.0% (40.0%)	0.0% to 78.0% (51.8%)
Duration (years)	2.6 to 18.4 (5.7)	0.5 to 13.2 (2.6)
<b>Equity securities</b>		
Level 3 assets	\$51	\$71
Multiples	3.9x to 11.0x (5.5x)	4.1x to 11.0x (5.4x)

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 yield for mortgages and other asset-backed loans and securities is appropriate for valuing a specific mortgage but may not be appropriate for valuing any other mortgages. 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 or duration 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 May 2019 and November 2018. Due to the distinctive nature of each level 3 cash instrument, the interrelationship of inputs is not necessarily uniform within each product type.

## Notes to the Financial Statements (Unaudited)

- Mortgages and other asset-backed loans and securities and corporate debt instruments and government and agency obligations 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.

**Derivative Instruments.** The company had net level 3 derivative instruments of \$1.90 billion as of May 2019 and \$1.86 billion as of November 2018.

The company's net level 3 financial instruments relating to commodities derivatives was \$4 million as of May 2019 and \$2 million as of November 2018 for which the range of significant unobservable inputs has not been disclosed as the amounts are not material.

The table below presents the amount of net level 3 derivative instruments, and ranges, averages and medians of significant unobservable inputs used to value interest rates, credit, currencies and equities derivative instruments.

\$ in millions	Net Level 3 Derivative Instruments and Range of Significant Unobservable Inputs (Average/Median) as of	
	May	November
	2019	2018
<b>Interest rates</b>	<b>\$126</b>	<b>\$76</b>
Correlation	(55)% to 14% ((11)%/11%)	71% to 72% (72%/72%)
Volatility (bps)	71 to 89 (79/78)	64 to 143 (84/78)
<b>Credit</b>	<b>\$2,101</b>	<b>\$2,003</b>
Credit spreads (bps)	2 to 637 (114/84)	2 to 589 (141/104)
Upfront credit points	30 to 37 (34/34)	1 to 46 (22/22)
Recovery rates	25% to 25% (25%/25%)	25% to 45% (37%/40%)
<b>Currencies</b>	<b>\$9</b>	<b>\$(115)</b>
Correlation	25% to 28% (26%/25%)	5% to 32% (18%/15%)
<b>Equities</b>	<b>\$(342)</b>	<b>\$(108)</b>
Correlation	(69)% to 97% (45%/48%)	(63)% to 98% (47%/53%)
Volatility	3% to 82% (14%/8%)	4% to 81% (17%/13%)

In the table above:

- Net derivative assets are shown as positive amounts and net 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.
- 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, and credit derivatives are valued using option pricing, correlation 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.

### Range of Significant Unobservable Inputs

The following is information about the ranges of significant unobservable inputs used to value the company'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 equity and a currency), as well as across regions.
- **Volatility.** Ranges for volatility cover numerous underliers across a variety of markets, maturities and strike prices. For example, volatility of equity indices is generally lower than volatility of single stocks.
- **Credit spreads, upfront credit points and recovery rates.** The ranges for credit spreads, upfront credit points and recovery rates cover a variety of underliers (index and single names), regions, sectors, maturities and credit qualities (high-yield and investment-grade) and also includes secured funding spreads. The broad range of this population gives rise to the width of the ranges of significant unobservable inputs.

## Notes to the Financial Statements (Unaudited)

### **Sensitivity of Fair Value Measurement to Changes in Significant Unobservable Inputs**

The following is a description of the directional sensitivity of the company's level 3 fair value measurements, as of both May 2019 and November 2018, to changes in significant unobservable inputs, in isolation:

- **Correlation.** In general, for contracts where the holder benefits from the consistent directional performance 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, and the fair value of secured funding capacity increases as secured funding spreads increase. 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.

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

**Other Financial Assets and Financial Liabilities.** Significant unobservable inputs of other financial assets and financial liabilities include:

- **Resale and Repurchase Agreements and Securities Borrowed and Loaned.** As of both May 2019 and November 2018, the company had no level 3 resale agreements, securities borrowed or securities loaned. As of both May 2019 and November 2018 level 3 repurchase agreements were not material.
- **Debtors.** As of both May 2019 and November 2018 level 3 debtors were nil.
- **Other Secured Financings.** As of both May 2019 and November 2018, the significant unobservable inputs used to value level 3 other secured financings are incorporated into the derivative instruments and cash instruments disclosures related to unobservable inputs. See "Cash Instruments" and "Derivative Instruments" above.

- **Other Creditors.** As of both May 2019 and November 2018, the significant unobservable inputs used to value level 3 other creditors are incorporated into derivative instruments and cash instruments disclosures related to unobservable inputs. See "Cash Instruments" and "Derivative Instruments" above.

### **Transfers Between Level 1 and Level 2 of the Fair Value Hierarchy**

During the six months ended May 2019 and the six months ended June 2018, there were no significant transfers between level 1 and level 2 financial assets and financial liabilities measured at fair value on a recurring basis.

### **Fair Value Financial Assets and Financial Liabilities Valued Using Techniques That Incorporate Unobservable Inputs**

The fair value of financial assets and financial liabilities may be determined in whole or part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument or based on available observable market data and changing these assumptions will change the resultant estimate of fair value. The potential impact of using reasonable possible alternative assumptions for the valuations, including significant unobservable inputs, has been quantified as approximately \$360 million as of May 2019 and \$382 million as of June 2018, for favourable changes, and \$234 million as of May 2019 and \$235 million as of June 2018, for unfavourable changes. In determining reasonably possible alternative unfavourable assumptions, a detailed business and position level review has been performed to identify and quantify instances where potential uncertainty exists. This has taken into account the positions' fair value as compared to the range of available market information. As of both May 2019 and June 2018, the impact for favourable changes was primarily driven by changes in the assumptions around secured funding spreads and valuation adjustments in equity and fixed income derivatives, and the impact for unfavourable changes was primarily driven by changes in the assumptions around secured funding spreads, volatility and correlation inputs.

## Notes to the Financial Statements (Unaudited)

The table below presents the amounts not recognised in the profit and loss account relating to the difference between the fair value of financial assets and financial liabilities at fair value through profit or loss at initial recognition (the transaction price) and the amounts determined at initial recognition using the valuation techniques (day 1 P&L).

\$ in millions	Six Months Ended	
	May 2019	June 2018
Beginning balance	\$146	\$161
New transactions	72	70
Amounts recognised in the profit and loss account during the period	(47)	(53)
<b>Ending balance</b>	<b>\$171</b>	<b>\$178</b>

### Level 3 Rollforward

The table below presents a summary of the changes in fair value for all level 3 financial assets and financial liabilities measured at fair value on a recurring basis.

\$ in millions	Six Months Ended	
	May 2019	June 2018
<b>Total financial assets</b>		
Beginning balance	\$ 5,314	\$ 4,044
Gains/(losses)	613	340
Purchases	253	396
Sales	(200)	(131)
Settlements	(447)	(362)
Transfers into level 3	493	820
Transfers out of level 3	(702)	(187)
<b>Ending balance</b>	<b>\$ 5,324</b>	<b>\$ 4,920</b>
<b>Total financial liabilities</b>		
Beginning balance	\$(12,874)	\$(10,807)
Gains/(losses)	(478)	323
Purchases	2	4
Sales	(153)	(282)
Issuances	(3,321)	(5,026)
Settlements	4,054	3,178
Transfers into level 3	(554)	(211)
Transfers out of level 3	967	934
<b>Ending balance</b>	<b>\$(12,357)</b>	<b>\$(11,887)</b>

In the table above:

- Financial assets relate to financial instruments owned.
- 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 financial assets, increases are shown as positive amounts, while decreases are shown as negative amounts. For level 3 financial liabilities, increases are shown as negative amounts, while decreases are shown as positive amounts.
- Transfers between levels of the fair value hierarchy are recognised at the beginning of the reporting period in which they occur. Accordingly, the tables do not include gains or losses for level 3 financial assets and financial liabilities that were transferred out of level 3 prior to the end of the period.

- Level 3 financial assets and financial liabilities are frequently economically hedged with level 1 and level 2 financial assets and financial liabilities. Accordingly, level 3 gains or losses that are reported for a particular class of financial asset or financial liability can be partially offset by gains or losses attributable to level 1 or level 2 in the same class of financial asset or financial liability or gains or losses attributable to level 1, level 2 or level 3 in a different class of financial asset or financial liability. As a result, gains or losses included in the level 3 rollforward do not necessarily represent the overall impact on the company's results of operations, liquidity or capital resources.
- The net gains on level 3 financial assets for the six months ended May 2019 and the six months ended June 2018 are reported in "Net revenues" in the profit and loss account.
- The net losses on level 3 financial liabilities of \$478 million for the six months ended May 2019 included losses of \$418 million reported in "Net revenues" in the profit and loss account and losses of \$60 million reported in "Debt valuation adjustment" in the statements of comprehensive income. The net gains on level 3 financial liabilities of \$323 million for the six months ended June 2018 included gains of \$211 million reported in "Net revenues" in the profit and loss account and gains of \$112 million reported in "Debt valuation adjustment" in the statements of comprehensive income.

The table below disaggregates, by the balance sheet line items, the information for financial liabilities included in the summary table above.

\$ in millions	Six Months Ended	
	May 2019	June 2018
<b>Financial instruments sold, but not yet purchased</b>		
Beginning balance	\$(2,385)	\$(2,281)
Gains/(losses)	(348)	(199)
Purchases	2	4
Sales	(153)	(282)
Settlements	278	579
Transfers into level 3	(226)	(142)
Transfers out of level 3	335	266
<b>Ending balance</b>	<b>\$(2,497)</b>	<b>\$(2,055)</b>
<b>Collateralised financings</b>		
Beginning balance	\$ (936)	\$ (642)
Gains/(losses)	56	37
Issuances	(116)	(285)
Settlements	–	15
Transfers out of level 3	19	–
<b>Ending balance</b>	<b>\$ (977)</b>	<b>\$ (875)</b>
<b>Other creditors</b>		
Beginning balance	\$(9,553)	\$(7,884)
Gains/(losses)	(186)	485
Issuances	(3,205)	(4,741)
Settlements	3,776	2,584
Transfers into level 3	(328)	(69)
Transfers out of level 3	613	668
<b>Ending balance</b>	<b>\$(8,883)</b>	<b>\$(8,957)</b>

## Notes to the Financial Statements (Unaudited)

### Transfers Between Level 2 and Level 3 of the Fair Value Hierarchy

**Six Months Ended May 2019.** Transfers into level 3 for financial assets and financial liabilities primarily reflected transfers of certain credit products from level 2, principally due to reduced transparency of certain credit spread and yield inputs and the transfers of certain equity products from level 2, principally due to reduced transparency of certain volatility and correlation inputs used to value these products. The reduced transparency was a result of a lack of market evidence.

Transfers out of level 3 financial assets and financial liabilities primarily reflected transfers of certain credit products to level 2, principally due to increased transparency of certain credit spread and yield inputs and transfers of certain equity products to level 2, principally due to increased transparency of certain volatility and correlation inputs used to value these products. The increased transparency was a result of an increase in the availability of market evidence.

**Six Months Ended June 2018.** Transfers into level 3 for financial assets and financial liabilities primarily reflected transfers of certain currency products from level 2, principally due to reduced transparency of certain modelling assumptions, and transfers of certain credit products from level 2, principally due to reduced transparency of certain spread and yield inputs. The reduced transparency was a result of a lack of market evidence.

Transfers out of level 3 for financial assets and financial liabilities primarily reflected transfers of certain equity products to level 2, principally due to increased transparency of certain equity volatility and correlation inputs. The increased transparency was a result of an increase in the availability of market evidence.

### Fair Value of Financial Assets and Financial Liabilities Not Measured at Fair Value

The company had current financial assets of \$139.57 billion as of May 2019 and \$144.66 billion as of November 2018 that are not measured at fair value. Given that substantially all of these balances are short-term in nature, their carrying amounts in the balance sheet are a reasonable approximation of fair value.

The company had current financial liabilities of \$123.48 billion as of May 2019 and \$131.97 billion as of November 2018 that are not measured at fair value. Given the short-term nature of these instruments, their carrying amounts in the balance sheet are a reasonable approximation of fair value. The company had financial liabilities that are due after more than one year of \$28.34 billion as of May 2019 and \$15.86 billion as of November 2018 that are not measured at fair value, which predominantly relate to long-term intercompany loans. The interest rates of these loans are variable in nature and approximate prevailing market interest rates for instruments with similar terms and characteristics. As such, their carrying amounts in the balance sheet are a reasonable approximation of fair value.