



---

# Unaudited Half-yearly Financial Report

## June 30, 2023

Goldman Sachs International (unlimited company)

Company Number: 02263951

## INDEX

	Page No.		Page No.
<b>Part I</b>		<b>Part II</b>	
<b>Management Report</b>	<b>2</b>	<b>Unaudited Financial Statements</b>	<b>16</b>
Introduction	2	Income Statement	16
Executive Overview	2	Statement of Comprehensive Income	16
Business Environment	4	Balance Sheet	17
Results of Operations	4	Statement of Changes in Equity	18
Balance Sheet and Funding Sources	7	Statement of Cash Flows	19
Capital Management and Regulatory Capital	8	<b>Notes to the Financial Statements</b>	<b>20</b>
Regulatory Matters and Other Developments	10	Note 1. General Information	20
Principal Risks and Uncertainties	10	Note 2. Summary of Significant Accounting Policies	20
Risk Management	10	Note 3. Critical Accounting Estimates and Judgements	20
Overview and Structure of Risk Management	11	Note 4. Net Revenues	21
Liquidity Risk Management	11	Note 5. Income Tax Expense	21
Market Risk Management	12	Note 6. Collateralised Agreements	21
Credit Risk Management	13	Note 7. Customer and Other Receivables	22
Operational Risk Management	15	Note 8. Trading Assets and Liabilities	22
Model Risk Management	15	Note 9. Investments	22
Other Risk Management	15	Note 10. Other Assets	23
Directors	15	Note 11. Collateralised Financings	23
Responsibility Statement	15	Note 12. Customer and Other Payables	23
		Note 13. Unsecured Borrowings	23
		Note 14. Other Liabilities	24
		Note 15. Share Capital	24
		Note 16. Other Equity Instruments	24
		Note 17. Dividends	24
		Note 18. Statement of Cash Flows Reconciliations	25
		Note 19. Contingent Liabilities	25
		Note 20. Related Party Disclosures	27
		Note 21. Financial Instruments	28
		Note 22. Fair Value Measurement	28
		Note 23. Financial Risk Management and Capital Management	33

## Management Report

### Introduction

Goldman Sachs International (GSI or the company) delivers a broad 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). The company's immediate parent undertaking is Goldman Sachs Group UK limited (GSG UK), a company incorporated and domiciled in England and Wales. GSG UK together with its consolidated subsidiaries form "GSG UK Group". In relation to the company, "GS Group affiliate" means Group Inc. or any of its subsidiaries. Group Inc., together with its consolidated subsidiaries, form "GS Group". GS Group is a leading global financial institution that delivers a broad range of financial services to a large and diversified client base that includes corporations, financial institutions, governments and individuals. The company's results prepared under United States Generally Accepted Accounting Principles (U.S. GAAP) are included in the consolidated financial statements of GS Group.

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 generates revenues from the following business activities: Investment Banking; Fixed Income, Currency and Commodities (FICC); Equities; and Investment Management. On April 1, 2023, the company transferred its U.K. asset management business to Goldman Sachs Asset Management International (GSAMI). As a result, the company no longer performs any significant asset management activity. See "Executive Overview — Transfer of U.K. Asset Management Business" for further details. Investment Management continues to include the company's Wealth management activity.

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-commitments/diversity-and-inclusion/](http://www.goldmansachs.com/our-commitments/diversity-and-inclusion/).

References to "the financial statements" are to the unaudited financial statements as presented in Part II of this financial report.

All references to June 2023, March 2023 and June 2022 refer to the periods ended, or the dates, as the context requires, June 30, 2023, March 31, 2023 and June 30, 2022, respectively. All references to December 2022 refer to the date December 31, 2022. All references to "the 2022 Annual Report" are the company's Annual Report for the year ended December 31, 2022.

### Executive Overview

The directors consider profit for the period, total assets and Common Equity Tier 1 (CET1) capital ratio as the company's key performance indicators.

#### Transfer of U.K. Asset Management Business

On April 1, 2023, the company transferred its U.K. asset management business to GSAMI, GS Group's primary U.K. asset management entity. This combines GSI's and GSAMI's U.K. asset management businesses in GSAMI, consistent with GS Group's resolution planning and the commercial objectives of its asset management business. This business had average annual net revenues in the last three years of \$436 million, approximately 300 employees and immaterial assets and liabilities as of the date of transfer.

As consideration for the transfer, the company received a non-controlling interest in a GS Group affiliate and recognised a gain of \$1.57 billion in Investment Management net revenues, equivalent to the fair value of this business. Based on the company's current capital planning, this gain is not expected to be recognised in regulatory capital.

#### Income Statement

##### Three Months Ended June 2023 versus June 2022.

The income statement is set out on page 16 of this financial report. The company's profit for the three months ended June 2023 was \$2.16 billion, compared with \$929 million for the three months ended June 2022. Excluding the gain on transfer of the U.K. asset management business, the company's profit for the three months ended June 2023 was \$583 million, 37% lower than the three months ended June 2022.

## Management Report

Net revenues were \$4.06 billion for the three months ended June 2023, 56% higher than the three months ended June 2022. Net revenues excluding the gain on transfer of the U.K. asset management business were \$2.49 billion for the three months ended June 2023, 4% lower than the three months ended June 2022, reflecting significantly lower net revenues in FICC and Investment Management, partially offset by significantly higher net revenues in Equities. Net revenues in Investment Banking were essentially unchanged.

Net operating expenses were \$1.58 billion for the three months ended June 2023, 10% higher than the three months ended June 2022, primarily due to higher compensation and benefits and transaction based expenses.

**Six Months Ended June 2023 versus June 2022.** The company's profit for the six months ended June 2023 was \$3.17 billion, compared with \$2.36 billion the six months ended June 2022. Excluding the gain on transfer of the U.K. asset management business, the company's profit for the six months ended June 2023 was \$1.59 billion, 33% lower than the six months ended June 2022.

Net revenues were \$7.08 billion for the six months ended June 2023, 15% higher compared with the six months ended June 2022. Net revenues excluding the gain on transfer of the U.K. asset management business were \$5.51 billion for the six months ended June 2023, 10% lower than the six months ended June 2022, reflecting significantly lower net revenues in FICC and Investment Management and lower net revenues in Investment Banking, partially offset by higher net revenues in Equities.

Net operating expenses were \$3.22 billion for the six months ended June 2023, 8% higher than the six months ended June 2022, primarily due to higher compensation and benefits and management charges from GS Group affiliates.

See "Results of Operations" below for more information about net revenues and net operating expenses.

### Capital Ratios

The company's CET1 capital ratio under the U.K. capital framework was 11.8% as of June 2023 and 12.8% as of December 2022.

In the second quarter of 2023, the company received regulatory approval to repurchase \$2.80 billion of its Additional Tier 1 notes (AT1 notes). These notes were repurchased at their fair value of \$2.27 billion, with the difference between their carrying value and fair value recognised in retained earnings. The company partially replaced this regulatory capital by issuing \$1.50 billion of Tier 2-eligible long-term subordinated loans.

### Balance Sheet

The balance sheet is set out on page 17 of this financial report.

As of June 2023, total assets were \$1.29 trillion, an increase of \$84.42 billion from December 2022, primarily reflecting an increase in cash and cash equivalents of \$53.84 billion (primarily due to a change in the proportion of Global Core Liquid Assets (GCLA) held as cash deposits), an increase in trading assets of \$19.67 billion (primarily due to an increase in trading cash instruments, partially offset by a decrease in derivatives) and an increase in other assets of \$11.49 billion (primarily due to an increase in intercompany loans).

As of June 2023, total liabilities were \$1.25 trillion, an increase of \$84.45 billion from December 2022, primarily reflecting an increase in collateralised financings of \$77.50 billion (primarily due to changes in firm and client activity), an increase in unsecured borrowings of \$20.48 billion (primarily due to an increase in intercompany loans), an increase in customer and other payables of \$15.22 billion (primarily due to an increase in cash collateral received and customer credit balances), partially offset by a decrease in trading liabilities of \$28.89 billion (primarily due to a decrease in derivatives, partially offset by an increase in trading cash instruments).

As of June 2023, total shareholder's equity was \$42.18 billion, essentially unchanged from December 2022. The company's total comprehensive income of \$3.04 billion for the six months ended June 2023 was offset by the repurchase of \$2.80 billion of its AT1 notes for \$2.27 billion, the payment of an interim dividend of \$655 million and the payment of interest on the company's AT1 notes of \$149 million.

Total level 3 financial assets were \$4.53 billion as of June 2023 and \$4.73 billion as of December 2022. See Note 22 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 June 2023, total assets were \$559.83 billion and total liabilities were \$524.82 billion. Total assets and total liabilities under U.S. GAAP differ from those reported under IFRS primarily due to the company presenting derivative balances gross under IFRS if they are not net settled in the normal course of business, even where it has a legally enforceable right to offset those balances.

## Management Report

### Business Environment

During the second quarter of 2023, broad macroeconomic and geopolitical concerns continued to weigh on global economic activity. Stress in the banking sector remained a key focus early in the second quarter, subsiding after U.S. regional banks showed stability and UBS Group AG, working in conjunction with Swiss regulators, acquired Credit Suisse Group AG. Uncertainty heightened regarding a resolution on the U.S. federal debt ceiling before being resolved. Concerns about persistent inflation and the economic outlook remained, but declining inflationary measures and signs of improved sentiment were positive developments. These factors contributed to higher global equity prices compared with the end of the first quarter of 2023, while the commercial real estate market continued to face increased pressure.

There remains uncertainty about the economic outlook, reflecting concerns about geopolitical risks, inflation and the commercial real estate sector, and about potential increases in regulatory requirements.

### Results of Operations

#### Net Revenues

Net revenues include the net profit arising from transactions, with both third parties and GS Group affiliates, in securities, foreign exchange and other financial instruments, and fees and commissions. This is inclusive of associated interest and dividends.

The table below presents net revenues by business activity.

\$ in millions	Three Months Ended June		Six Months Ended June	
	2023	2022	2023	2022
Investment Banking	\$ 261	\$ 256	\$ 496	\$ 561
FICC	698	968	1,922	2,691
Equities	1,377	1,121	2,692	2,300
Investment Management	1,722	255	1,970	579
<b>Total</b>	<b>\$ 4,058</b>	<b>\$ 2,600</b>	<b>\$ 7,080</b>	<b>\$ 6,131</b>

In the table above, Investment Management net revenues included a gain of \$1.57 billion from the transfer of the company's U.K. asset management business to GSAMI.

In the fourth quarter of 2022, the company updated its methodology for allocating funding costs, reported within net revenues, to its business activities. As a result, in the table above, comparatives have been conformed to the current period presentation, with no impact to total net revenues.

#### Investment Banking

Investment Banking primarily generates revenues from the following:

**Advisory.** Includes strategic advisory engagements with respect to mergers and acquisitions, divestitures, corporate defence activities, restructurings and spin-offs.

**Underwriting.** Includes public offerings and private placements for both local and cross-border transactions of a wide range of securities and other financial instruments, including acquisition financing.

**Corporate lending.** Includes relationship lending and related hedges.

**Three Months Ended June 2023 versus June 2022.** Net revenues in Investment Banking were \$261 million for the three months ended June 2023, essentially unchanged compared with the three months ended June 2022, primarily due to higher net revenues in Underwriting and Advisory, partially offset by lower net revenues in Corporate lending. The increase in Underwriting reflected higher net revenues in Equity underwriting and Debt underwriting. Advisory net revenues were higher reflecting an increase in completed mergers and acquisitions transactions.

As of June 2023, the EMEA investment banking backlog was lower compared with March 2023, primarily due to lower estimated net revenues from potential advisory transactions and potential equity underwriting transactions. Estimated net revenues from potential debt underwriting transactions were essentially unchanged.

**Six Months Ended June 2023 versus June 2022.** Net revenues in Investment Banking were \$496 million for the six months ended June 2023, 12% lower than the six months ended June 2022, primarily due to lower net revenues in Advisory and Corporate lending, partially offset by higher net revenues in Underwriting. Advisory net revenues were lower reflecting a decrease in industry-wide completed mergers and acquisitions transactions. The increase in Underwriting reflected higher net revenues in Equity underwriting, partially offset by lower net revenues in Debt underwriting.

As of June 2023, the EMEA investment banking backlog was lower compared with December 2022, primarily due to significantly lower estimated net revenues from potential advisory transactions, partially offset by higher estimated net revenues from equity underwriting transactions. Estimated net revenues from potential debt underwriting transactions were essentially unchanged.

The backlog represents an estimate of net revenues from future transactions where the company believes that future revenue realisation is more likely than not. The changes in backlog may be a useful indicator of client activity levels which, over the long term, impact net revenues. However, the time frame for completion and corresponding revenue recognition of transactions in the backlog varies based on the nature of the assignment, as certain transactions may remain in the backlog for longer periods of time. In addition, the backlog is subject to certain limitations, such as assumptions about the likelihood that individual client transactions will occur in the future. Transactions may be cancelled or modified, and transactions not included in the estimate may also occur.

## Management Report

### FICC

FICC generates revenues from intermediation and financing activities.

- **FICC intermediation.** Includes client execution activities related to making markets in both cash and derivative instruments, as detailed below.

**Interest Rate Products.** Government bonds (including inflation-linked securities) across maturities, other government-backed securities, and interest rate swaps, options and other derivatives.

**Credit Products.** Investment-grade and high-yield corporate securities, credit derivatives, exchange-traded funds (ETFs), bank and bridge loans, municipal securities, 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, agricultural, base, precious and other metals, electricity, including renewable power, environmental products and other commodity products.

- **FICC financing.** Includes (i) secured lending to the company's clients through structured credit and asset-backed lending, (ii) commodity financing to clients through structured transactions and (iii) financing through securities purchased under agreements to resell (resale agreements).

**Three Months Ended June 2023 versus June 2022.** Net revenues in FICC were \$698 million for the three months June 2023, 28% lower than the three months ended June 2022, due to significantly lower net revenues in FICC intermediation and FICC financing. The decrease in FICC intermediation reflected significantly lower net revenues in commodities and currencies and lower net revenues in interest rate products, partially offset by higher net revenues in mortgages and credit products. The decrease in FICC financing was primarily driven by significantly lower net revenues from structured credit. The decrease in FICC intermediation net revenues reflected significantly lower client activity, as activity in the prior year period benefited from an evolving macroeconomic environment.

**Six Months Ended June 2023 versus June 2022.** Net revenues in FICC were \$1.92 billion for the six months ended June 2023, 29% lower than the six months ended June 2022, due to significantly lower net revenues in FICC intermediation. Net revenues in FICC financing were essentially unchanged. The decrease in FICC intermediation reflected significantly lower net revenues in currencies and commodities, partially offset by significantly higher net revenues in interest rate products and mortgages and higher net revenues in credit products. The decrease in FICC intermediation net revenues reflected significantly lower client activity, as activity in the prior year period benefited from an evolving macroeconomic environment.

### Equities

Equities generates revenues from intermediation and financing activities.

- **Equities intermediation.** 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 financing.** Includes prime financing, which provides services that principally involve borrowing and lending securities. In addition, the company provides financing to its clients for their securities trading activities through margin loans and executes swap transactions to provide clients with exposure to securities and indices. Financing activities also include portfolio financing, which clients can utilise to manage their investment portfolio, and other equity financing activities, including securities-based loans to individuals.

**Three Months Ended June 2023 versus June 2022.** Net revenues in Equities were \$1.38 billion for the three months ended June 2023, 23% higher compared with the three months ended June 2022, due to significantly higher net revenues in Equities financing, partially offset by significantly lower net revenues in Equities intermediation. The increase in Equities financing primarily reflected higher prime financing. The decrease in Equities intermediation reflected significantly lower net revenues in cash products and lower net revenues in derivatives.

**Six Months Ended June 2023 versus June 2022.** Net revenues in Equities were \$2.69 billion for the six months ended June 2023, 17% higher compared with the six months ended June 2022, due to significantly higher net revenues in Equities financing, partially offset by significantly lower net revenues in Equities intermediation. The increase in Equities financing primarily reflected higher prime financing. The decrease in Equities intermediation reflected lower net revenues in derivatives and, to a lesser extent, significantly lower net revenues in cash products.

## Management Report

### Investment Management

Investment Management includes Asset management and Wealth management.

In the first quarter of 2023 and year ended December 2022, Asset management included investment services provided to GS Group affiliates or funds managed by GS Group and direct investments made by the company, which are typically longer-term in nature. On April 1, 2023, the company transferred its U.K. asset management business to GSAMI. As a result, the company no longer performs any significant asset management activity.

Wealth management includes wealth advisory services, including portfolio management and financial counselling, brokerage and other transaction services to high-net-worth individuals and families.

**Three Months Ended June 2023 versus June 2022.** Net revenues in Investment Management were \$1.72 billion for the three months ended June 2023, compared with \$255 million for the three months ended June 2022. Net revenues excluding the gain on transfer of the U.K. asset management business were \$149 million, 42% lower than the three months ended June 2022, primarily due to significantly lower net revenues in Asset management, partially offset by higher net revenues in Wealth management.

**Six Months Ended June 2023 versus June 2022.** Net revenues in Investment Management were \$1.97 billion for the six months ended June 2023, compared with \$579 million for the six months ended June 2022. Net revenues excluding the gain on transfer of the U.K. asset management business were \$397 million, 31% lower than the six months ended June 2022, primarily due to significantly lower net revenues in Asset management, partially offset by higher net revenues in Wealth management.

### Net Operating Expenses

Net operating 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. Compensation and benefits include salaries, allowances, estimated year-end discretionary compensation, amortisation of share-based compensation, changes in the fair value of share-based payment awards between grant date and delivery date 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.

Where the company recognises revenues in its capacity as principal to a transaction and incurs expenses to satisfy some or all of its performance obligations under these transactions, it is required by IFRS 15 'Revenue from Contracts with Customers' (IFRS 15) to report these revenues gross of the associated expenses. Such expenses are included in transaction based and other expenses (known hereafter as "IFRS 15 expenses").

The table below presents net operating expenses and headcount.

\$ in millions	Three Months Ended June		Six Months Ended June	
	2023	2022	2023	2022
Compensation and benefits	\$ 560	\$ 471	\$ 1,158	\$ 1,010
Transaction based	461	404	865	831
Market development	15	19	30	31
Communications and technology	34	38	67	75
Depreciation and amortisation	69	62	137	125
Professional fees	40	43	77	84
Management charges from GS Group affiliates	268	231	590	520
Other expenses	217	220	428	404
<b>Operating expenses</b>	<b>1,664</b>	<b>1,488</b>	<b>3,352</b>	<b>3,080</b>
Management charges to GS Group affiliates	(87)	(53)	(137)	(98)
<b>Net operating expenses</b>	<b>\$ 1,577</b>	<b>\$ 1,435</b>	<b>\$ 3,215</b>	<b>\$ 2,982</b>
<b>Headcount at period-end</b>	<b>3,282</b>	<b>3,805</b>		

In the table above:

- Compensation and benefits included a credit of \$12 million for the three months ended June 2023, a credit of \$142 million for the three months ended June 2022, a credit of \$38 million for the six months ended June 2023 and a credit of \$326 million for the six months ended June 2022 representing changes in the fair value of share-based payment awards recharged from Group Inc. during the period.
- Compensation and benefits include staff costs related to the company's employees. Management charges from GS Group affiliates includes staff costs recharged to the company by other GS Group affiliates. Management charges to GS Group affiliates includes staff costs recharged by the company to other GS Group affiliates.

## Management Report

**Three Months Ended June 2023 versus June 2022.** Net operating expenses were \$1.58 billion for the three months ended June 2023, 10% higher than the three months ended June 2022.

Compensation and benefits were \$560 million for the three months ended June 2023, 19% higher than the three months ended June 2022. Excluding the impact of changes in the fair value of share-based payment awards recharged from Group Inc. for both periods, compensation and benefits were \$572 million for the three months ended June 2023, 7% lower than the three months ended June 2022, mainly reflecting a decrease in estimated year-end discretionary compensation.

Transaction based expenses were \$461 million for the three months ended June 2023, 14% higher than the three months ended June 2022, primarily reflecting an increase in IFRS 15 expenses and brokerage, clearing, exchange and distribution fees.

**Six Months Ended June 2023 versus June 2022.** Net operating expenses were \$3.22 billion for the six months ended June 2023, 8% higher than the six months ended June 2022.

Compensation and benefits were \$1.16 billion for the six months ended June 2023, 15% higher than the six months ended June 2022. Excluding the impact of changes in the fair value of share-based payment awards recharged from Group Inc. for both periods, compensation and benefits were \$1.20 billion for the six months ended June 2023, 10% lower than the six months ended June 2022, mainly reflecting a decrease in estimated year-end discretionary compensation.

Management charges from GS Group affiliates were \$590 million for the six months ended June 2023, 13% higher than the six months ended June 2022, primarily due to an increase in compensation and infrastructure charges.

As of June 2023, headcount was 15% lower compared with December 2022, primarily reflecting the transfer of approximately 300 employees to GSAMI in connection with the transfer of the company's U.K. asset management business and a headcount reduction initiative in the first quarter of 2023.

### Income Tax Expense

The company's effective tax rate was 18.1% for the six months ended June 2023, which compares to the combined U.K. corporation tax rate (including banking surcharge) of 27.75%. The effective tax rate represents the company's income tax expense divided by its profit before taxation. This difference primarily reflects the company's gain on the intra-U.K. transfer of its U.K. asset management business being non-taxable.

## Balance Sheet and Funding Sources

### Balance Sheet Management

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

### Funding Sources

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

- Securities sold under agreements to repurchase (repurchase agreements) and securities loaned;
- Intercompany loans from GS Group affiliates;
- Debt securities issued including notes, certificates, commercial paper and warrants; and
- Other borrowings including funded derivatives and transfers of assets accounted for as financings rather than sales.

See "Balance Sheet and Funding Source" in Part I of the 2022 Annual Report for further information about the company's balance sheet management process and funding sources.



## Management Report

### 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. See “Capital Management and Regulatory Capital” in Part I of the 2022 Annual Report for further information about the company’s capital management process and regulatory capital.

#### Capital Management

The company determines the appropriate amount and composition of its 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.

#### Regulatory Capital

The company is subject to the U.K. capital framework, which is largely based on the Basel Committee on Banking Supervision’s (Basel Committee) capital framework for strengthening international capital standards (Basel III). The Basel Committee is the primary global standard setter for prudential bank regulation.

The risk-based capital requirements are expressed as capital ratios that compare measures of regulatory capital to risk-weighted assets (RWAs). The CET1 capital ratio is defined as CET1 capital 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.

In the second quarter of 2023, the company received regulatory approval and repurchased \$2.80 billion of its AT1 notes. The company partially replaced this regulatory capital by issuing \$1.50 billion of Tier 2-eligible long-term subordinated loans. In addition, the company paid an interim dividend of \$655 million to GSG UK in the second quarter of 2023.

#### Regulatory Risk-Based Capital Ratios

The table below presents information about the company’s minimum risk-based capital requirements.

	As of	
	June 2023	December 2022
CET1 capital ratio	8.8%	8.7%
Tier 1 capital ratio	10.7%	10.7%
Total capital ratio	13.4%	13.3%

Effective July 5, 2023, the Bank of England increased the U.K. countercyclical capital buffer to 2% of banks’ exposures to U.K. borrowers and counterparties after having increased it from 0% to 1% in December 2022.

The table below presents information about the company’s risk-based capital ratios.

\$ in millions	As of	
	June 2023	December 2022
<b>Risk-based capital and RWAs</b>		
CET1 capital	\$ 32,784	\$ 31,780
Additional Tier 1 notes	\$ 5,500	\$ 8,300
Tier 1 capital	\$ 38,284	\$ 40,080
Tier 2 capital	\$ 6,877	\$ 5,377
Total capital	\$ 45,161	\$ 45,457
RWAs	\$277,857	\$247,653
<b>Risk-based capital ratios</b>		
CET1 capital ratio	11.8%	12.8%
Tier 1 capital ratio	13.8%	16.2%
Total capital ratio	16.3%	18.4%

In the table above:

- The company’s risk-based capital ratios as of June 2023 included the company’s profit after foreseeable charges for the six months ended June 2023 that are still subject to verification by the company’s external auditors and approval by the PRA for inclusion in risk-based capital. These profits contributed approximately 26 basis points to the company’s risk-based capital ratios as of June 2023, which represents the company’s profit for the financial period reduced by foreseeable charges, divided by its RWAs.
- The company’s CET1 capital ratio as of June 2023 decreased compared with December 2022, primarily due to an increase in RWAs, partially offset by an increase in CET1 capital.
- The company’s Tier 1 capital ratio as of June 2023 decreased compared with December 2022, primarily due to an increase in RWAs and the repurchase of \$2.80 billion of AT1 notes, partially offset by an increase in CET1 capital.
- The company’s Total capital ratio as of June 2023 decreased compared with December 2022, primarily due to an increase in RWAs and the repurchase of \$2.80 billion of AT1 notes, partially offset by the issuance of \$1.50 billion of Tier 2-eligible long-term subordinated loans and an increase in CET1 capital.

## Management Report

### Risk-Based Capital

The table below presents information about the company's risk-based capital.

\$ in millions	As of	
	June 2023	December 2022
Share capital	\$ 598	\$ 598
Share premium account	5,568	5,568
Retained earnings	30,761	27,870
Accumulated other comprehensive income	(252)	(127)
Deductions	(3,891)	(2,129)
<b>CET1 capital</b>	<b>32,784</b>	<b>31,780</b>
Additional Tier 1 notes	5,500	8,300
<b>Tier 1 capital</b>	<b>\$ 38,284</b>	<b>\$ 40,080</b>
<b>Tier 2 capital</b>	<b>6,877</b>	<b>5,377</b>
<b>Total capital</b>	<b>\$ 45,161</b>	<b>\$ 45,457</b>

In the table above, the increase in retained earnings from December 2022 to June 2023 included a gain of \$1.57 billion related to the transfer of the company's U.K. asset management business to GSAMI. Based on the company's current capital planning, this gain is not expected to be recognised in regulatory capital, resulting in a corresponding increase in CET1 capital deductions as of June 2023.

During both the six months ended June 2023 and the year ended December 2022, the company was in compliance with the capital requirements set by the PRA.

### Risk-Weighted Assets

The table below presents information about the company's RWAs.

\$ in millions	As of	
	June 2023	December 2022
Credit RWAs	\$ 151,675	\$ 134,192
Market RWAs	103,209	90,488
Operational RWAs	22,973	22,973
<b>Total</b>	<b>\$ 277,857</b>	<b>\$ 247,653</b>

In the table above:

- Credit RWAs as of June 2023 increased by \$17.48 billion compared with December 2022, primarily reflecting an increase in modelled derivative exposures, the impact of the company's holding of a non-controlling interest in another GS Group affiliate as a result of the transfer of its U.K. asset management business to GSAMI, and increases in cash and cash equivalents and intercompany loans to GS Group affiliates.
- Market RWAs as of June 2023 increased by \$12.72 billion compared with December 2022, primarily reflecting an increase in stressed value-at-risk due to increased equities and derivatives exposures and increased market volatility.

See "Capital Management and Regulatory Capital" in Part I of the 2022 Annual Report for a description of each RWA component.

### Leverage Ratio

From January 1, 2023, the leverage ratio framework was revised to set a minimum leverage ratio requirement at 3.35%, inclusive of buffers. This minimum leverage ratio is applicable to GSG UK Group, which includes the company. The leverage ratio compares 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 company had a leverage ratio of 5.1% as of June 2023 and 6.1% as of December 2022. The leverage ratio as of June 2023 included the company's profits after foreseeable charges for the six months ended June 2023 that are still subject to verification by the company's external auditors and approval by the PRA for inclusion in risk-based capital. These profits contributed approximately 9 basis points to the leverage ratio as of June 2023, which represents the company's profit for the financial period reduced by foreseeable charges, divided by its leverage exposure. The company's leverage ratio as of June 2023 decreased compared with December 2022, due to an increase in leverage exposures and a decrease in Tier 1 capital.

### 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 GS Group affiliates. As of both June 2023 and December 2022, the company was in compliance with this requirement.

The table below presents information about the company's MREL.

\$ in millions	As of	
	June 2023	December 2022
Total regulatory capital	\$45,161	\$45,457
Eligible senior intercompany borrowings	16,690	16,690
<b>Total MREL</b>	<b>\$61,851</b>	<b>\$62,147</b>

In the table above, eligible senior intercompany borrowings excludes accrued interest.

### Swaps, Derivatives and Commodities Regulation

The company is a registered swap dealer with the Commodity Futures Trading Commission (CFTC) and a registered security-based swap dealer with the U.S. Securities and Exchange Commission (SEC). As of both June 2023 and December 2022, the company was subject to and in compliance with applicable capital requirements for swap dealers and security-based swap dealers.

## Management Report

### Regulatory Matters and Other Developments

#### Replacement of Interbank Offered Rates (IBORs), including London Interbank Offered Rate (LIBOR)

As of July 1, 2023, the publication of all LIBOR settings as representative rates has ceased. The FCA has allowed the publication and use of synthetic rates for certain GBP LIBOR settings in legacy GBP LIBOR-based contracts through March 2024 and for certain USD LIBOR settings in legacy USD LIBOR-based contracts through September 2024.

The International Swaps and Derivatives Association (ISDA) 2020 IBOR Fallbacks Protocol (IBOR Protocol) has provided derivatives market participants with amended fallbacks for legacy and new derivative contracts to mitigate legal or economic uncertainty. Both counterparties had to adhere to the IBOR Protocol or engage in bilateral amendments for the terms to be effective for derivative contracts. The FCA's formal announcement to cease all LIBOR settings fixed the spread adjustment for all LIBOR rates and, as of July 1, 2023, the fallbacks have been applied for all LIBOR settings. Rules adopted by the FRB under the Adjustable Interest Rate (LIBOR) Act provide different Secured Overnight Financing Rate (SOFR)-based rates for contracts governed by U.S. law that have no fallbacks or fallbacks that would require the use of a poll or LIBOR-based rate.

The company had facilitated an orderly transition from non-USD LIBORs to alternative risk-free reference rates and synthetic rates for itself and its clients in connection with the cessation of non-USD LIBOR.

In connection with the cessation of USD LIBOR, all of the company's USD LIBOR-based derivative contracts have been transitioned to alternative risk-free reference rates. The company's USD LIBOR-based unsecured borrowings and collateralised agreements have been transitioned to alternative risk-free reference rates or converted to synthetic rates.

#### Stress in the Banking Sector

During the second quarter of 2023, the level of stress in the banking sector eased compared to the circumstances that arose in March 2023, which had led to the failure of certain regional banks in the U.S. and the combination of Switzerland's two largest banks.

These events have placed heightened focus on the impact that rising interest rates have had on the market values of securities portfolios of banks measured at amortised cost. The company's securities measured at amortised cost were \$4 million as of both June 2023 and December 2022. All other securities held by the company were measured at fair value through profit or loss.

The company's liquidity position during the second quarter of 2023 remained strong, as the company's GCLA averaged \$78.88 billion for the quarter.

Any future systemic spread of concerns regarding the financial stability or solvency of banks could negatively impact the company's liquidity, results of operations and financial condition.

### Principal Risks and Uncertainties

The company faces a variety of risks that are substantial and inherent in its businesses. The principal risks and uncertainties that the company faces are: market risk, liquidity risk, credit risk, operational risk, legal and regulatory risk, competition risk, and market developments and general business environment risk. Those risks and uncertainties are consistent with those described in the 2022 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 "Overview and Structure of Risk Management" in Part I of the 2022 Annual Report and for 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".

## 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 (known hereafter as the "Board"), 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, an extensive committee structure with representation from senior management of the company is central 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 "Overview and Structure of Risk Management" in Part I of the 2022 Annual Report for further information.

### 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 "Liquidity Risk Management" in Part I of the 2022 Annual Report for further information about the company's liquidity risk management process.

### Global Core Liquid Assets (GCLA)

GCLA is liquidity that the company maintains to meet a broad range of potential cash outflows and collateral needs in a stressed environment. In order to determine the appropriate size of the company's GCLA, the company models liquidity outflows over a range of scenarios and time horizons. See "Liquidity Risk Management" in Part I of the 2022 Annual Report for further information about the company's sources of GCLA, internal liquidity risk models and company-wide stress tests.

The table below presents information about GCLA.

<i>\$ in millions</i>	Average for the Three Months Ended	
	June 2023	March 2023
Overnight cash deposits	\$ 46,434	\$ 34,962
U.S. government obligations	24,342	24,179
Non-U.S. government obligations	8,108	15,755
<b>Total</b>	<b>\$ 78,884</b>	<b>\$ 74,896</b>

The GCLA held by the company is intended for use only by the company to meet its liquidity requirements and is assumed not to be available to Group Inc. or Goldman Sachs Funding LLC (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. The company's average monthly LCR for the trailing twelve-month period ended June 2023 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. The Basel Committees' NSFR framework requires banking organisations to maintain a minimum NSFR of 100%. The company is subject to the applicable NSFR requirement implemented in the U.K. As of June 2023 and December 2022, the company's NSFR exceeded the minimum requirement.

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.

## Management Report

### Credit Ratings

The company relies on the debt capital markets to fund a significant portion of its day-to-day operations and the cost and availability of debt financing is influenced by the company's 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.

The table below presents the unsecured credit ratings and outlook of the company and Group Inc.

	As of June 2023		
	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-1	A-2
Long-term debt	A	A2	BBB+
Subordinated debt	BBB+	Baa2	BBB
Trust preferred	BBB-	Baa3	BB+
Preferred stock	BBB-	Ba1	BB+
Ratings outlook	Stable	Stable	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 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- or two-notch downgrade in Group Inc.'s and/or the company's credit ratings.

\$ in millions	As of	
	June 2023	December 2022
Additional collateral or termination payments:		
One-notch downgrade	\$ 119	\$ 132
Two-notch downgrade	\$ 701	\$ 568

### Market Risk Management

#### Overview

Market risk is the risk of an adverse impact to the company's earnings 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 interest rate risk, equity price risk, currency rate risk and commodity price risk.

See "Market Risk Management" in Part I of the 2022 Annual Report for further information about the company's market risk management process.

#### Value-at-Risk (VaR)

VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. See "Market Risk Management" in Part I of the 2022 Annual Report for further information about GS Group's VaR model, which is applied consistently by the company.

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.

\$ in millions	Three Months Ended			Six Months Ended June	
	June 2023	March 2023	June 2022	2023	2022
<b>Categories</b>					
Interest rates	\$ 35	\$ 35	\$ 40	\$ 35	\$ 36
Equity prices	23	25	27	24	26
Currency rates	10	12	13	11	13
Commodity prices	2	2	1	2	1
Diversification effect	(25)	(28)	(32)	(26)	(29)
<b>Total</b>	<b>\$ 45</b>	<b>\$ 46</b>	<b>\$ 49</b>	<b>\$ 46</b>	<b>\$ 47</b>

The company's average daily VaR decreased to \$45 million for the three months ended June 2023 from \$46 million for the three months ended March 2023, primarily due to lower levels of volatility. The total decrease was primarily driven by decreases in the equity prices and currency rates categories, partially offset by a decrease in the diversification effect.

The company's average daily VaR decreased to \$45 million for the three months ended June 2023 from \$49 million for the three months ended June 2022, primarily due to lower levels of volatility. The total decrease was primarily driven by decreases in the interest rates and equity prices categories, partially offset by a decrease in the diversification effect.

The company's average daily VaR decreased to \$46 million for the six months ended June 2023 from \$47 million for the six months ended June 2022, primarily due to lower levels of volatility. The total decrease was primarily driven by decreases in the equity prices and currency rates categories, partially offset by a decrease in the diversification effect.

## Management Report

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

\$ in millions	As of		
	June 2023	March 2023	June 2022
<b>Categories</b>			
Interest rates	\$ 27	\$ 32	\$ 42
Equity prices	20	22	25
Currency rates	9	11	12
Commodity prices	2	2	1
Diversification effect	(21)	(26)	(28)
<b>Total</b>	<b>\$ 37</b>	<b>\$ 41</b>	<b>\$ 52</b>

The company's period-end VaR decreased to \$37 million as of June 2023 from \$41 million as of March 2023, primarily due to lower levels of volatility. The total decrease was primarily driven by decreases in the interest rates, equity prices and currency rates categories, partially offset by a decrease in the diversification effect.

The company's period-end VaR decreased to \$37 million as of June 2023 from \$52 million as of June 2022, primarily due to lower levels of volatility. The total decrease was primarily driven by decreases in the interest rates and equity prices categories, partially offset by a decrease in the diversification effect.

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

\$ in millions	Three Months Ended					
	June 2023		March 2023		June 2022	
	High	Low	High	Low	High	Low
<b>Categories</b>						
Interest rates	\$ 44	\$ 25	\$ 42	\$ 29	\$ 56	\$ 29
Equity prices	\$ 26	\$ 18	\$ 37	\$ 17	\$ 35	\$ 22
Currency rates	\$ 17	\$ 7	\$ 23	\$ 7	\$ 32	\$ 6
Commodity prices	\$ 3	\$ 1	\$ 4	\$ 1	\$ 2	\$ 1
<b>Company-wide VaR</b>	<b>\$ 54</b>	<b>\$ 37</b>	<b>\$ 73</b>	<b>\$ 39</b>	<b>\$ 74</b>	<b>\$ 39</b>

### 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 \$13.8 million as of June 2023, \$12.5 million as of March 2023 and \$8.3 million as of June 2022.

## 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), customer and other receivables and other assets. In addition, the company holds other positions that give rise to credit risk (e.g., bonds). These credit risks are captured as a component of market risk measures, which are monitored and managed by Market Risk. See "Credit Risk Management" in Part I of the 2022 Annual Report for further information about the company's credit risk management process.

### Credit Risk Exposure

The table below presents 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 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. See "Credit Risk Management" in Part I of the 2022 Annual Report for detailed descriptions of credit exposures for each financial asset category.

\$ in millions	Fair value	Amortised cost	Total
<b>As of June 2023</b>			
Gross credit exposure	\$ 1,047,404	\$ 239,040	\$ 1,286,444
Net credit exposure	\$ 32,737	\$ 94,198	\$ 126,935
<b>As of December 2022</b>			
Gross credit exposure	\$ 1,025,207	\$ 176,668	\$ 1,201,875
Net credit exposure	\$ 22,606	\$ 40,205	\$ 62,811

## Management Report

**Financial Instruments Measured at Fair Value.** The table below presents the company's gross credit exposure to financial assets measured at fair value through profit or loss and net credit exposure after taking account of assets captured by

market risk in the company's risk management process, counterparty netting, and cash and security collateral received and cash collateral posted under credit support agreements, which management considers when determining credit risk.

<i>\$ in millions</i>	Collateralised agreements	Trading assets	Investments	Loans	Other assets	Total
<b>As of June 2023</b>						
Gross credit exposure	\$ 142,744	\$ 892,481	\$ 266	\$ 182	\$ 11,731	\$ 1,047,404
Assets captured by market risk	—	(102,944)	(266)	—	—	(103,210)
Counterparty netting	(38,397)	(711,293)	—	—	—	(749,690)
Cash collateral	(255)	(44,015)	—	—	—	(44,270)
Security collateral received	(102,955)	(14,427)	—	(115)	—	(117,497)
<b>Net credit exposure</b>	<b>\$ 1,137</b>	<b>\$ 19,802</b>	<b>\$ —</b>	<b>\$ 67</b>	<b>\$ 11,731</b>	<b>\$ 32,737</b>
<b>As of December 2022</b>						
Gross credit exposure	\$ 151,739	\$ 872,810	\$ 280	\$ 222	\$ 156	\$ 1,025,207
Assets captured by market risk	—	(62,410)	(280)	—	—	(62,690)
Counterparty netting	(31,987)	(733,376)	—	—	—	(765,363)
Cash collateral	(427)	(41,489)	—	—	—	(41,916)
Security collateral received	(118,212)	(14,319)	—	(101)	—	(132,632)
<b>Net credit exposure</b>	<b>\$ 1,113</b>	<b>\$ 21,216</b>	<b>\$ —</b>	<b>\$ 121</b>	<b>\$ 156</b>	<b>\$ 22,606</b>

The table below presents the company's gross and net credit exposure to financial assets measured at fair value through profit or loss by internally determined public rating agency equivalents and other credit metrics.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
<b>Gross credit exposure</b>		
AAA	\$ 9,368	\$ 7,266
AA	87,152	83,822
A	735,113	767,372
BBB	72,779	69,742
BB or lower	37,557	33,666
Unrated	2,225	649
Assets captured by market risk	103,210	62,690
<b>Total</b>	<b>\$ 1,047,404</b>	<b>\$ 1,025,207</b>
<b>Net credit exposure</b>		
AAA	\$ 2,404	\$ 2,234
AA	2,884	4,007
A	15,897	5,351
BBB	6,032	6,620
BB or lower	3,412	4,118
Unrated	2,108	276
<b>Total</b>	<b>\$ 32,737</b>	<b>\$ 22,606</b>

In the table above:

- Unrated credit exposures relate to financial assets for which the company has not assigned an internally determined public rating agency equivalent.
- Net credit exposure primarily relates to derivatives and other assets.

### Financial Instruments Measured at Amortised Cost.

The company's financial assets measured at amortised cost are set out in Note 21 to the financial statements. These amounts represent the company's gross credit exposure to financial assets measured at amortised cost.

The company's financial assets measured at amortised cost were 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 as of June 2023 and December 2022. The expected credit losses (ECL) on these financial assets were not material as of June 2023 and December 2022 as the majority of the company's financial assets measured at amortised cost are short-term in nature or collateralised. There have been no significant changes in estimation techniques or significant assumptions made during the reporting period.

The table below presents the company's gross and net credit exposure to financial assets measured at amortised cost by internally determined public rating agency equivalents and other credit metrics.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
<b>Gross credit exposure</b>		
AAA	\$ 2,312	\$ 1,879
AA	65,999	18,222
A	128,521	118,772
BBB	17,821	15,189
BB or lower	22,598	20,844
Unrated	1,789	1,762
<b>Total</b>	<b>\$ 239,040</b>	<b>\$ 176,668</b>
<b>Net credit exposure</b>		
AAA	\$ 1,568	\$ 725
AA	59,191	12,048
A	24,213	19,524
BBB	4,759	3,080
BB or lower	2,736	3,271
Unrated	1,731	1,557
<b>Total</b>	<b>\$ 94,198</b>	<b>\$ 40,205</b>

In the table above:

- Unrated credit exposures relate to financial assets for which the company has not assigned an internally determined public rating agency equivalent.
- Net credit exposure primarily relates to cash and cash equivalents and customer and other receivables.

## 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. The company's 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 "Operational Risk Management" in Part I of the 2022 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. The company relies on quantitative models across its business activities primarily to value certain financial assets and liabilities, to monitor and manage its risk, and to measure and monitor the company's regulatory capital.

See "Model Risk Management" in Part I of the 2022 Annual Report for further information about the company's model risk management process.

### Other Risk Management

In addition to the areas of risk discussed above, the company manages other risks, including capital, climate, compliance and conflicts. See "Overview and Structure of Risk Management" in Part I of the 2022 Annual Report for further information.

### Directors

There were no changes in the directorship of the company between the date of issue of this financial report and the 2022 Annual Report.

### Responsibility Statement

The financial statements have been prepared in accordance with IAS 34 'Interim Financial Reporting' and Article 5 of the Directive 2004/109/EC as amended by Directive 2013/50/EU. The directors confirm to the best of their knowledge:

- The financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the company;
- The management report includes an indication of important events that have occurred during the first six months of the financial year, and their impact on the financial statements, together with a description of the principal risks and uncertainties for the remaining six months of the financial year. The principal risks and uncertainties are consistent with those described in "Principal Risks and Uncertainties" in this management report and the 2022 Annual Report.



**L. A. Donnelly**  
**Director**  
**August 30, 2023**



# Unaudited Financial Statements

GOLDMAN SACHS INTERNATIONAL (UNLIMITED COMPANY)

## Income Statement (Unaudited)

<i>\$ in millions</i>	Note	Three Months		Six Months	
		Ended June		Ended June	
		2023	2022	2023	2022
Gains or losses from financial instruments at fair value through profit or loss		\$ 2,715	\$ 2,530	\$ 5,760	\$ 5,723
Fees and commissions		533	445	1,055	963
Other income		1,573	—	1,573	—
Non-interest income		4,821	2,975	8,388	6,686
Interest income from financial instruments measured at fair value through profit or loss		2,505	798	4,640	1,406
Interest income from financial instruments measured at amortised cost		3,082	577	5,720	968
Interest expense from financial instruments measured at fair value through profit or loss		(3,034)	(901)	(5,746)	(1,584)
Interest expense from financial instruments measured at amortised cost		(3,316)	(849)	(5,922)	(1,345)
Net interest expense		(763)	(375)	(1,308)	(555)
<b>Net revenues</b>	4	<b>4,058</b>	2,600	<b>7,080</b>	6,131
Net operating expenses		(1,577)	(1,435)	(3,215)	(2,982)
<b>Profit before taxation</b>		<b>2,481</b>	1,165	<b>3,865</b>	3,149
Income tax expense	5	(325)	(236)	(699)	(785)
<b>Profit for the financial period</b>		<b>\$ 2,156</b>	\$ 929	<b>\$ 3,166</b>	\$ 2,364

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

## Statement of Comprehensive Income (Unaudited)

<i>\$ in millions</i>	Note	Three Months		Six Months	
		Ended June		Ended June	
		2023	2022	2023	2022
Profit for the financial period		\$ 2,156	\$ 929	\$ 3,166	\$ 2,364
<b>Other comprehensive income</b>					
<b>Items that will not be reclassified subsequently to profit or loss</b>					
Actuarial loss relating to the pension scheme		(72)	(109)	(63)	(127)
Debt valuation adjustment	13	(96)	233	(108)	420
U.K. deferred tax attributable to the components of other comprehensive income		47	(33)	48	(85)
<b>Other comprehensive income/(loss) for the financial period, net of tax</b>		<b>(121)</b>	91	<b>(123)</b>	208
<b>Total comprehensive income for the financial period</b>		<b>\$ 2,035</b>	\$ 1,020	<b>\$ 3,043</b>	\$ 2,572

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

## Balance Sheet (Unaudited)

<i>\$ in millions</i>	Note	As of	
		June 2023	December 2022
<b>Assets</b>			
Cash and cash equivalents		\$ 65,551	\$ 11,707
Collateralised agreements	6	238,891	235,796
Customer and other receivables	7	75,342	78,967
Trading assets (includes \$44,252 and \$20,708 pledged as collateral)	8	892,481	872,810
Investments (includes \$3 and \$3 pledged as collateral)	9	266	280
Loans		182	222
Other assets	10	14,744	3,259
<b>Total assets</b>		<b>\$ 1,287,457</b>	<b>\$ 1,203,041</b>
<b>Liabilities</b>			
Collateralised financings	11	\$ 202,233	\$ 124,735
Customer and other payables	12	126,198	110,983
Trading liabilities	8	815,427	844,313
Unsecured borrowings	13	96,680	76,205
Other liabilities	14	4,744	4,596
<b>Total liabilities</b>		<b>1,245,282</b>	<b>1,160,832</b>
<b>Shareholder's equity</b>			
Share capital	15	598	598
Share premium account		5,568	5,568
Other equity instruments	16	5,500	8,300
Retained earnings		30,761	27,870
Accumulated other comprehensive income		(252)	(127)
<b>Total shareholder's equity</b>		<b>42,175</b>	<b>42,209</b>
<b>Total liabilities and shareholder's equity</b>		<b>\$ 1,287,457</b>	<b>\$ 1,203,041</b>

## Statement of Changes in Equity (Unaudited)

<i>\$ in millions</i>	Note	Six Months Ended June	
		2023	2022
<b>Share capital</b>			
Beginning balance		\$ 598	\$ 598
Ending balance		598	598
<b>Share premium account</b>			
Beginning balance		5,568	5,568
Ending balance		5,568	5,568
<b>Other equity instruments</b>			
Beginning balance		8,300	8,300
Repurchase of Additional Tier 1 notes	16	(2,800)	—
Ending balance		5,500	8,300
<b>Retained earnings</b>			
Beginning balance		27,870	24,590
Profit for the financial period		3,166	2,364
Transfer of realised debt valuation adjustment into retained earnings, net of tax	13	2	—
Difference between fair value and carrying value of repurchased Additional Tier 1 notes	16	527	—
Interest on Additional Tier 1 notes	16	(149)	—
Interim dividend paid	17	(655)	—
Share-based payments		285	566
Management recharge related to share-based payments		(285)	(566)
Ending balance		30,761	26,954
<b>Accumulated other comprehensive income</b>			
Beginning balance		(127)	(161)
Other comprehensive income/(loss)		(123)	208
Transfer of realised debt valuation adjustment into retained earnings, net of tax	13	(2)	—
Ending balance		(252)	47
<b>Total shareholder's equity</b>		<b>\$ 42,175</b>	<b>\$ 41,467</b>

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

## Statement of Cash Flows (Unaudited)

<i>\$ in millions</i>	Note	Six Months Ended June	
		2023	2022
<b>Cash flows from operating activities</b>			
Cash generated from operations	18	\$ 53,919	\$ 11,291
Taxation received		—	2
Taxation paid		(217)	(245)
Net cash from operating activities		53,702	11,048
<b>Cash flows from investing activities</b>			
Capital expenditure for property, leasehold improvements and equipment and intangible assets		(101)	(127)
Purchase of investments		—	(22)
Proceeds from sales of investments		9	48
Net cash used in investing activities		(92)	(101)
<b>Cash flows from financing activities</b>			
Repurchase of Additional Tier 1 notes	16	(2,273)	—
Receipts from issuing long-term subordinated loans		1,500	—
Interest paid on Additional Tier 1 notes	16	(149)	—
Interim dividends paid	17	(655)	—
Payments for lease liabilities		(1)	—
Net cash used in financing activities		(1,578)	—
Net increase in cash and cash equivalents, net of overdrafts		52,032	10,947
Cash and cash equivalents, net of overdrafts, beginning balance		11,639	52,408
Foreign exchange gains/(losses) on cash and cash equivalents, net of overdrafts		1,800	(3,396)
<b>Cash and cash equivalents, net of overdrafts, ending balance</b>	18	<b>\$ 65,471</b>	<b>\$ 59,959</b>

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

## 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 Plumtree Court, 25 Shoe Lane, London, EC4A 4AU, United Kingdom.

The company's immediate parent undertaking is Goldman Sachs Group UK Limited (GSG UK), a company incorporated and domiciled in England and Wales. GSG UK together with its consolidated subsidiaries forms "GSG UK Group".

The ultimate controlling undertaking and the parent company of the smallest and 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/investor-relations](http://www.goldmansachs.com/investor-relations).

### Note 2.

#### Summary of Significant Accounting Policies

##### Statement of Compliance

The company prepares financial statements under U.K.-adopted international accounting standards and International Financial Reporting Standards (IFRS) adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union (E.U.) (IFRS as it applies in the E.U.), which are consistent. These financial statements have been prepared in accordance with IAS 34 'Interim Financial Reporting' and Article 5 of the Directive 2004/109/EC as amended by Directive 2013/50/EU. These financial statements should be read in conjunction with the 2022 Annual Report, which were prepared in accordance with U.K.-adopted international accounting standards, the requirements of the Companies Act 2006, as applicable to companies reporting under those standards, and IFRS as it applies in the E.U.

##### Accounting Policies

The accounting policies are consistent with those described in the 2022 Annual Report.

### Note 3.

#### Critical Accounting Estimates and Judgements

The company's critical accounting estimates and judgements are consistent with those described in the 2022 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.

## Notes to the Financial Statements (Unaudited)

### Note 4.

#### Net Revenues

Net revenues include net interest expense and non-interest income. Net interest expense includes interest and dividends on financial instruments measured at fair value and amortised cost.

The table below presents net revenues.

\$ in millions	Three Months Ended June		Six Months Ended June	
	2023	2022	2023	2022
<b>Non-interest income</b>				
Financial instruments mandatorily measured at fair value through profit or loss	\$ 3,218	\$ (716)	\$ 8,142	\$ (762)
Financial instruments designated at fair value through profit or loss	(503)	3,246	(2,382)	6,485
Fees and commissions	533	445	1,055	963
Other income	1,573	—	1,573	—
<b>Non-interest income</b>	<b>4,821</b>	<b>2,975</b>	<b>8,388</b>	<b>6,686</b>
<b>Interest income</b>				
Financial instruments measured at fair value through profit or loss	2,505	798	4,640	1,406
Financial instruments measured at amortised cost	3,082	577	5,720	968
<b>Total interest income</b>	<b>5,587</b>	<b>1,375</b>	<b>10,360</b>	<b>2,374</b>
<b>Interest expense</b>				
Financial instruments measured at fair value through profit or loss	(3,034)	(901)	(5,746)	(1,584)
Financial instruments measured at amortised cost	(3,316)	(849)	(5,922)	(1,345)
<b>Total interest expense</b>	<b>(6,350)</b>	<b>(1,750)</b>	<b>(11,668)</b>	<b>(2,929)</b>
<b>Net interest expense</b>	<b>(763)</b>	<b>(375)</b>	<b>(1,308)</b>	<b>(555)</b>
<b>Net revenues</b>	<b>\$ 4,058</b>	<b>\$ 2,600</b>	<b>\$ 7,080</b>	<b>\$ 6,131</b>

In the table above:

- Non-interest income from financial instruments mandatorily measured at fair value through profit or loss primarily relates to non-interest gains and losses on trading assets, investments, loans, trading liabilities and certain collateralised agreements.
- Non-interest income from financial instruments designated at fair value through profit or loss primarily relates to non-interest gains and losses on certain unsecured borrowings and collateralised financings.
- Fees and commissions primarily relates to net revenues from certain financial advisory and underwriting engagements, executing and clearing client transactions and certain investment management services.
- Other income reflects the gain the company recognised on transfer of its U.K. asset management business to GSAMI.
- Financial instruments designated at fair value through profit or loss are frequently economically hedged with financial instruments measured mandatorily at fair value through profit or loss. Accordingly, gains or losses that are reported in financial instruments designated at fair value through profit or loss can be partially offset by gains or losses reported in financial instruments measured mandatorily at fair value through profit or loss.

### Note 5.

#### Income Tax Expense

The table below presents the company's income tax expense.

\$ in millions	Three Months Ended June		Six Months Ended June	
	2023	2022	2023	2022
Current tax	\$ 362	\$ 238	\$ 581	\$ 563
Deferred tax	(37)	(2)	118	222
<b>Total income tax expense</b>	<b>\$ 325</b>	<b>\$ 236</b>	<b>\$ 699</b>	<b>\$ 785</b>

The Finance Act 2022, which decreased the bank surcharge applicable to the company from 8.0% to 3.0% from April 1, 2023, was enacted in February 2022. During the first quarter of 2022, the company's deferred tax assets were remeasured and a deferred tax expense of \$49 million was recognised in the income statement.

In July 2023, the Finance (No. 2) Act 2023 enacted certain provisions of the Organisation for Economic Co-operation and Development Global Anti-Base Erosion Model Rules (Pillar Two), including a Domestic Minimum Top-Up Tax, which will apply to GS Group from January 2024. Pillar Two aims to ensure that multinationals pay a minimum effective corporate tax rate of 15% in each jurisdiction in which they operate. GS Group, including the company, is currently evaluating the impact on its 2024 annual effective tax rate.

### Note 6.

#### Collateralised Agreements

The table below presents collateralised agreements.

\$ in millions	As of	
	June 2023	December 2022
Resale agreements	\$ 123,599	\$ 129,433
Securities borrowed	115,292	106,363
<b>Total</b>	<b>\$ 238,891</b>	<b>\$ 235,796</b>

## Notes to the Financial Statements (Unaudited)

### Note 7.

#### Customer and Other Receivables

The table below presents customer and other receivables.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
Receivables from broker/dealers and clearing organisations	\$ 16,980	\$ 19,200
Receivables from customers and counterparties	58,362	59,767
<b>Total</b>	<b>\$ 75,342</b>	<b>\$ 78,967</b>

In the table above, total customer and other receivables primarily consists of receivables resulting from collateral posted in connection with certain derivative transactions, customer margin loans and balances related to listed derivative activity.

### Note 8.

#### Trading Assets and Liabilities

Trading assets and liabilities include trading cash instruments and derivatives held in connection with the company's market-making or risk management activities. Trading assets includes assets pledged as collateral.

The table below presents trading assets.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
<b>Trading cash instruments</b>		
Money market instruments	\$ 39	\$ 20
Government and agency obligations	32,333	18,301
Mortgage and other asset-backed loans and securities	280	198
Corporate debt instruments	24,301	20,092
Equity securities	56,304	33,670
Commodities	312	148
<b>Total trading cash instruments</b>	<b>113,569</b>	<b>72,429</b>
<b>Derivatives</b>		
Interest rates	583,285	599,737
Credit	23,995	19,782
Currencies	100,138	111,249
Commodities	12,269	19,647
Equities	59,225	49,966
<b>Total derivatives</b>	<b>778,912</b>	<b>800,381</b>
<b>Total trading assets</b>	<b>\$ 892,481</b>	<b>\$ 872,810</b>

The table below presents trading liabilities.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
<b>Trading cash instruments</b>		
Government and agency obligations	\$ 26,481	\$ 14,109
Corporate debt instruments	5,038	5,532
Equity securities	31,137	37,037
Commodities	15	16
<b>Total trading cash instruments</b>	<b>62,671</b>	<b>56,694</b>
<b>Derivatives</b>		
Interest rates	559,253	585,621
Credit	21,254	17,453
Currencies	99,401	114,335
Commodities	12,393	20,207
Equities	60,455	50,003
<b>Total derivatives</b>	<b>752,756</b>	<b>787,619</b>
<b>Total trading liabilities</b>	<b>\$ 815,427</b>	<b>\$ 844,313</b>

In the tables above:

- Corporate debt instruments includes corporate loans, debt securities, convertible debentures, prepaid commodity transactions and transfers of assets accounted for as secured loans rather than purchases.
- Equity securities includes public equities and exchange-traded funds.

### Note 9.

#### Investments

Investments includes debt instruments and equity securities that are accounted for at fair value and are generally held by the company in connection with its long-term investing activities. Investments includes assets pledged as collateral.

The table below presents information about investments.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
Corporate debt instruments	\$ 51	\$ 45
Equity securities	215	235
<b>Total</b>	<b>\$ 266</b>	<b>\$ 280</b>

In the table above:

- Corporate debt instruments primarily includes senior, mezzanine and distressed debt.
- Equity securities consists of the company's public and private equity-related investments in corporate entities.

## Notes to the Financial Statements (Unaudited)

### Note 10.

#### Other Assets

The table below presents other assets by type.

\$ in millions	As of	
	June 2023	December 2022
Intercompany loans	\$ 10,455	\$ 683
Investment in subsidiary	140	136
Investment in GS Group affiliate (non-controlling)	1,573	—
Miscellaneous receivables and other	1,563	1,274
<b>Total financial assets</b>	<b>13,731</b>	<b>2,093</b>
Property, leasehold improvements and equipment	4	5
Intangible assets	527	560
Right-of-use assets	8	8
Pension surplus	—	40
Deferred tax assets	315	385
Prepayments and accrued income	40	43
Tax-related assets	114	121
Miscellaneous receivables and other	5	4
<b>Total non-financial assets</b>	<b>1,013</b>	<b>1,166</b>
<b>Total</b>	<b>\$ 14,744</b>	<b>\$ 3,259</b>

In the table above:

- Both the company's investment in subsidiary and investment in GS Group affiliate (non-controlling) have been measured at fair value in accordance with IFRS 9.
- Miscellaneous receivables and other included in financial assets primarily includes receivables from GS Group affiliates, including receivables for allocation of net revenues among GS Group affiliates for their participation in GS Group's business activities.

### Note 11.

#### Collateralised Financings

The table below presents collateralised financings.

\$ in millions	As of	
	June 2023	December 2022
Repurchase agreements	\$ 111,658	\$ 80,172
Securities loaned	74,887	31,019
Intercompany loans	6,217	7,027
Debt securities issued	4,264	2,393
Other borrowings	5,207	4,124
<b>Total</b>	<b>\$ 202,233</b>	<b>\$ 124,735</b>

In the table above:

- Current collateralised financings were \$146.27 billion as of June 2023 and \$86.21 billion as of December 2022 and non-current collateralised financings were \$55.96 billion as of June 2023 and \$38.52 billion as of December 2022.
- Intercompany loans, debt securities issued and other borrowings are secured by securities which have been pledged as collateral. This pledged collateral is either recognised in trading assets or collateralised agreements.

### Note 12.

#### Customer and Other Payables

The table below presents customer and other payables.

\$ in millions	As of	
	June 2023	December 2022
Payables to broker/dealers and clearing organisations	\$ 1,957	\$ 3,133
Payables to customers and counterparties	124,241	107,850
<b>Total</b>	<b>\$ 126,198</b>	<b>\$ 110,983</b>

In the table above, total customer and other payables primarily consist of cash collateral received in connection with certain derivative transactions, customer credit balances related to the company's prime brokerage activities and balances related to listed derivative activity.

### Note 13.

#### Unsecured Borrowings

The table below presents unsecured borrowings.

\$ in millions	As of	
	June 2023	December 2022
Bank loans	\$ 100	\$ 100
Overdrafts	80	68
Intercompany loans – non-MREL-eligible	39,975	19,519
Intercompany loans – MREL-eligible	17,334	16,774
Debt securities issued	24,768	26,929
Subordinated loans	7,116	5,407
Other borrowings	7,307	7,408
<b>Total</b>	<b>\$ 96,680</b>	<b>\$ 76,205</b>

In the table above:

- Current unsecured borrowings were \$19.19 billion as of June 2023 and \$20.03 billion as of December 2022 and non-current unsecured borrowings were \$77.49 billion as of June 2023 and \$56.18 billion as of December 2022.
- Payments on debt securities issued and other borrowings instruments are typically referenced to underlying financial assets, which are predominately interest rates, equities and currencies-related.
- Subordinated loans of \$7.12 billion as of June 2023 and \$5.41 billion as of December 2022 consist of long-term loans of \$6.88 billion as of June 2023 and \$5.38 billion as of December 2022 from GSG UK and associated accrued interest. These loans 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. These loans constitute regulatory capital as approved by the PRA and are repayable subject to PRA approval. These loans are repayable between December 26, 2029 and September 9, 2030.



## 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 information about the cumulative net pre-tax DVA gains/(losses) on such financial liabilities, which is included in accumulated other comprehensive income.

\$ in millions	Three Months Ended June		Six Months Ended June	
	2023	2022	2023	2022
Beginning balance	\$ 97	\$ (1)	\$ 111	\$ (188)
Debt valuation adjustment	(96)	233	(108)	420
Transfer to retained earnings	—	(1)	(2)	(1)
<b>Ending balance</b>	<b>\$ 1</b>	<b>\$ 231</b>	<b>\$ 1</b>	<b>\$ 231</b>

In the table above, net gains of \$nil (\$nil, net of tax) for the three months ended June 2023, net gains of \$1 million (\$nil, net of tax) for the three months ended June 2022, net gains of \$2 million (\$2 million, net of tax) for the six months ended June 2023 and net gains of \$1 million (\$nil, net of tax) for the six months ended June 2022 realised upon early redemption of certain such financial liabilities, have been transferred from accumulated other comprehensive income to retained earnings.

### Note 14.

#### Other Liabilities

The table below presents other liabilities by type.

\$ in millions	As of	
	June 2023	December 2022
Compensation and benefits	\$ 1,564	\$ 2,000
Income tax-related liabilities	279	240
Lease liabilities	8	9
Accrued expenses and other	2,344	1,949
<b>Total financial liabilities</b>	<b>4,195</b>	<b>4,198</b>
Income tax-related liabilities	215	3
Other taxes and social security costs	311	395
Pension deficit	23	—
<b>Total non-financial liabilities</b>	<b>549</b>	<b>398</b>
<b>Total</b>	<b>\$ 4,744</b>	<b>\$ 4,596</b>

### Note 15.

#### Share Capital

The table below presents share capital.

Allotted, called up and fully paid	Ordinary shares of \$1 each	\$ in millions
<b>As of June 2023</b>	<b>598,182,053</b>	<b>\$ 598</b>
As of December 2022	598,182,053	\$ 598
As of December 2021	598,182,053	\$ 598

### Note 16.

#### Other Equity Instruments

The table below presents information about unsecured AT1 notes.

Month of issuance	Number of AT1 notes	\$ millions	Interest rate
June 2017	5,500	\$ 5,500	9.00% p.a.
November 2018	—	—	—
<b>As of June 2023</b>	<b>5,500</b>	<b>\$ 5,500</b>	
June 2017	5,800	\$ 5,800	9.00% p.a.
November 2018	2,500	2,500	8.67% p.a.
<b>As of December 2022</b>	<b>8,300</b>	<b>\$ 8,300</b>	

The company's AT1 notes of \$1 million each have been issued to GSG UK. They have no fixed maturity date and are not callable.

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

In the second quarter of 2023, the company repurchased and cancelled \$2.80 billion of its AT1 notes at their fair value of \$2.27 billion. The difference between the carrying value and fair value of these repurchased notes of \$527 million was recognised in retained earnings.

In addition, the company paid interest of \$149 million on the repurchased notes, which was recognised directly in retained earnings. The associated tax effect was recognised in income tax expense.

### Note 17.

#### Dividends

The company declared and paid an interim dividend of \$655 million in the second quarter of 2023 to GSG UK, representing \$1.09 per share.

## Notes to the Financial Statements (Unaudited)

### Note 18.

#### Statement of Cash Flows Reconciliations

The table below presents cash and cash equivalents, net of overdrafts for the purpose of the statement of cash flows.

<i>\$ in millions</i>	As of June	
	2023	2022
Cash and cash equivalents	\$ 65,551	\$ 60,096
Overdrafts (see Note 13)	(80)	(137)
<b>Total</b>	<b>\$ 65,471</b>	<b>\$ 59,959</b>

In the table above, cash and cash equivalents included cash that is restricted for use by the company of \$2.47 billion as of June 2023 and \$2.93 billion as of June 2022.

#### Reconciliation of Cash Flows From Operating Activities

The table below presents a reconciliation of cash flows from operating activities.

<i>\$ in millions</i>	Six Months Ended June	
	2023	2022
Profit before taxation	\$ 3,865	\$ 3,149
<b>Adjustments for</b>		
Depreciation and amortisation	137	125
Credit for defined benefit plan	—	(2)
Foreign exchange losses/(gains)	(1,786)	3,366
Share-based compensation expense	66	(202)
Provisions	—	8
Interest on subordinated loans and MREL-eligible intercompany loans	768	241
Losses on investments	5	5
Cash generated before changes in operating assets and liabilities	3,055	6,690
<b>Changes in operating assets</b>		
Decrease/(increase) in collateralised agreements	(3,095)	536
Decrease in customer and other receivables	3,625	2,723
Increase in trading assets	(19,671)	(45,557)
Decrease in loans	40	198
Increase in other assets	(11,679)	(3,685)
Changes in operating assets	(30,780)	(45,785)
<b>Changes in operating liabilities</b>		
Increase in collateralised financings	77,498	375
Increase in customer and other payables	15,215	665
Increase/(decrease) in trading liabilities	(28,886)	44,894
Increase in unsecured borrowings	18,087	6,084
Decrease in other liabilities	(270)	(1,632)
Changes in operating liabilities	81,644	50,386
<b>Cash generated from operations</b>	<b>\$ 53,919</b>	<b>\$ 11,291</b>

In the table above, cash generated from operations included interest paid of \$7.66 billion for the six months ended June 2023 and \$2.45 billion for the six months ended June 2022, and interest received of \$10.19 billion for the six months ended June 2023 and \$1.70 billion for the six months ended June 2022.

### Note 19.

#### 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. Except as noted in the first matter below, it is not practicable to reliably estimate the possible financial impact in excess of provisions, if any, of these proceedings on the company.

**Banco Espirito Santo S.A. and Oak Finance.** Beginning in February 2015, the company commenced actions against Novo Banco S.A. (Novo Banco) in the English Commercial Court and the Bank of Portugal (BoP) in the Portuguese Administrative Court in response to BoP's decisions in December 2014, September 2015 and December 2015 to reverse an earlier transfer to Novo Banco of an \$835 million facility agreement (the Facility), structured by the company, between Oak Finance Luxembourg S.A. (Oak Finance), a special purpose vehicle formed in connection with the Facility, and Banco Espirito Santo S.A. (BES) prior to the failure of BES. In July 2018, the English Supreme Court found that the English courts will not have jurisdiction over the company's action unless and until the Portuguese Administrative Court finds against BoP in the company's parallel action. In July 2018, the Liquidation Committee for BES issued a decision seeking to claw back from the company \$54 million paid to the company and \$50 million allegedly paid to Oak Finance in connection with the Facility, alleging that the company acted in bad faith in extending the Facility, including because the company allegedly knew that BES was at risk of imminent failure. In October 2018, the company commenced an action in Lisbon Commercial Court challenging the Liquidation Committee's decision and has since also issued a claim against the Portuguese State seeking compensation for losses of approximately \$222 million related to the failure of BES, together with a contingent claim for the \$104 million sought by the Liquidation Committee. On April 11, 2023, GSI commenced administrative proceedings against the BoP, seeking the nullification of the BoP's September 2015 and December 2015 decisions on new grounds.

## Notes to the Financial Statements (Unaudited)

**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 conduct from 2008 to 2012, but granted the motion to add limited allegations from 2013 to 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.

**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. On March 29, 2020, the court granted the defendants' motions to dismiss and for reconsideration, resulting in the dismissal of all claims, and on February 27, 2023, the U.S. Court of Appeals for the Second Circuit reversed the district court's dismissal of certain plaintiffs' antitrust claims and vacated the district court's dismissal of the plaintiffs' Commodity Exchange Act claim. On April 12, 2023, the defendants' petition for rehearing or rehearing en banc with the U.S. Court of Appeals for the Second Circuit was denied.

The company is among the defendants in a number of putative class and individual actions filed beginning on August 1, 2013 and consolidated in the U.S. District Court for the Southern District of New York. The complaints generally allege violations of federal antitrust laws and state laws in connection with the storage of aluminium and aluminium trading. The complaints seek declaratory, injunctive and other equitable relief, as well as unspecified monetary damages, including treble damages. In December 2016, the district court granted defendants' motions to dismiss and on August 27, 2019, the Second Circuit vacated the district court's dismissals and remanded the case to district court for further proceedings. On July 23, 2020, the district court denied the class plaintiffs' motion for class certification, and on December 16, 2020 the Second Circuit denied leave to appeal the denial. On February 17, 2021, the district court granted defendants' motion for summary judgment with respect to the claims of most of the individual plaintiffs. On April 14, 2021, the plaintiffs appealed to the U.S. Court of Appeals for the Second Circuit. On May 31, 2022, the two remaining individual plaintiffs entered into a settlement with the defendants. The company has paid the full amount of its contribution to the settlement.

**Credit Default Swap Antitrust Litigation.** The company is among the defendants named in a putative antitrust class action relating to the settlement of credit default swaps, filed on June 30, 2021 in the U.S. District Court for the District of New Mexico. The complaint generally asserts claims under federal antitrust law and the Commodity Exchange Act in connection with an alleged conspiracy among the defendants to manipulate the benchmark price used to value credit default swaps for settlement. The complaint also asserts a claim for unjust enrichment under state common law. The complaint seeks declaratory and injunctive relief, as well as unspecified amounts of treble and other damages. On November 15, 2021, the defendants filed a motion to dismiss the complaint. On February 4, 2022, the plaintiffs filed an amended complaint and voluntarily dismissed Group Inc. from the action. On June 5, 2023, the court dismissed the claims against certain foreign defendants for lack of personal jurisdiction, but denied the defendants' motion to dismiss with respect to Goldman Sachs & Co. LLC, GSI and the remaining defendants.

## Notes to the Financial Statements (Unaudited)

**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 securities offering process and underwriting practices;
- 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 and regulatory reporting, technology systems and controls, securities lending practices, prime brokerage activities, 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 U.S. Foreign Corrupt Practices Act;
- 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 20.

#### Related Party Disclosures

Parties are considered to be related if one party has the ability to directly or indirectly control the other party or exercise significant influence over the party in making financial or operational decisions. The company’s related parties include:

- The company’s parent entities;
- Other GS Group affiliates;
- Key management personnel of the company;
- Key management personnel of the company’s parent entities; and
- Other related parties, which includes the company’s defined benefit scheme and associates of GS Group.

The company enters into transactions with related parties in the normal course of business as part of its market-making activities and general operations. These transactions primarily relate to risk management and market-making activity, funding activity, cash management services, commitments and guarantees, transfer pricing and management charges, taxation, share-based payments and transactions with key management personnel, including compensation paid and payable.

The nature of these transactions for the six months ended June 2023 are consistent with those disclosed in Note 27 “Related Party Disclosures” in Part II of the company’s 2022 Annual Report.

## Notes to the Financial Statements (Unaudited)

### Note 21.

#### Financial Instruments

##### Financial Assets and Liabilities by Category

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

\$ in millions	Financial Assets		
	Mandatorily at fair value	Amortised cost	Total
<b>As of June 2023</b>			
Cash and cash equivalents	\$ —	\$ 65,551	\$ 65,551
Collateralised agreements	142,744	96,147	238,891
Customer and other receivables	—	75,342	75,342
Trading assets	892,481	—	892,481
Investments	266	—	266
Loans	182	—	182
Other assets	11,731	2,000	13,731
<b>Total</b>	<b>\$ 1,047,404</b>	<b>\$ 239,040</b>	<b>\$ 1,286,444</b>
<b>As of December 2022</b>			
Cash and cash equivalents	\$ —	\$ 11,707	\$ 11,707
Collateralised agreements	151,739	84,057	235,796
Customer and other receivables	—	78,967	78,967
Trading assets	872,810	—	872,810
Investments	280	—	280
Loans	222	—	222
Other assets	156	1,937	2,093
<b>Total</b>	<b>\$ 1,025,207</b>	<b>\$ 176,668</b>	<b>\$ 1,201,875</b>

\$ in millions	Financial Liabilities			
	Held for trading	Designated at fair value	Amortised cost	Total
<b>As of June 2023</b>				
Collateralised financings	\$ —	\$ 107,076	\$ 95,157	\$ 202,233
Customer and other payables	—	—	126,198	126,198
Trading liabilities	815,427	—	—	815,427
Unsecured borrowings	—	60,605	36,075	96,680
Other liabilities	—	—	4,195	4,195
<b>Total</b>	<b>\$815,427</b>	<b>\$ 167,681</b>	<b>\$ 261,625</b>	<b>\$1,244,733</b>
<b>As of December 2022</b>				
Collateralised financings	\$ —	\$ 77,539	\$ 47,196	\$ 124,735
Customer and other payables	—	—	110,983	110,983
Trading liabilities	844,313	—	—	844,313
Unsecured borrowings	—	40,247	35,958	76,205
Other liabilities	—	—	4,198	4,198
<b>Total</b>	<b>\$844,313</b>	<b>\$ 117,786</b>	<b>\$ 198,335</b>	<b>\$1,160,434</b>

### Note 22.

#### Fair Value Measurement

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

IFRS 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 this 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 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 liabilities may require 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.

#### Valuation Techniques and Significant Inputs

The valuation techniques and significant inputs used in determining the fair value of the company's financial assets and liabilities disclosed below are consistent with those described in Note 29 "Fair Value Measurement" in Part II of the 2022 Annual Report.

## Notes to the Financial Statements (Unaudited)

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

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

<i>\$ in millions</i>	Level 1	Level 2	Level 3	Total
<b>As of June 2023</b>				
<b>Financial assets</b>				
Collateralised agreements	\$ —	\$ 142,628	\$ 116	\$ 142,744
Trading cash instruments	78,763	34,343	463	113,569
Derivative instruments	15	775,073	3,824	778,912
Trading assets	78,778	809,416	4,287	892,481
Investments	3	196	67	266
Loans	—	127	55	182
Other assets	—	11,731	—	11,731
<b>Total</b>	<b>\$ 78,781</b>	<b>\$ 964,098</b>	<b>\$ 4,525</b>	<b>\$ 1,047,404</b>
<b>Financial liabilities</b>				
Collateralised financings	\$ —	\$ 106,436	\$ 640	\$ 107,076
Trading cash instruments	56,333	6,299	39	62,671
Derivative instruments	38	750,346	2,372	752,756
Trading liabilities	56,371	756,645	2,411	815,427
Unsecured borrowings	—	55,332	5,273	60,605
<b>Total</b>	<b>\$ 56,371</b>	<b>\$ 918,413</b>	<b>\$ 8,324</b>	<b>\$ 983,108</b>
<b>Net derivatives</b>	<b>\$ (23)</b>	<b>\$ 24,727</b>	<b>\$ 1,452</b>	<b>\$ 26,156</b>
<b>As of December 2022</b>				
<b>Financial assets</b>				
Collateralised agreements	\$ —	\$ 151,621	\$ 118	\$ 151,739
Trading cash instruments	44,917	26,956	556	72,429
Derivative instruments	166	796,286	3,929	800,381
Trading assets	45,083	823,242	4,485	872,810
Investments	4	205	71	280
Loans	—	168	54	222
Other assets	—	156	—	156
<b>Total</b>	<b>\$ 45,087</b>	<b>\$ 975,392</b>	<b>\$ 4,728</b>	<b>\$ 1,025,207</b>
<b>Financial liabilities</b>				
Collateralised financings	\$ —	\$ 77,144	\$ 395	\$ 77,539
Trading cash instruments	49,689	6,997	8	56,694
Derivative instruments	55	785,240	2,324	787,619
Trading liabilities	49,744	792,237	2,332	844,313
Unsecured borrowings	—	35,099	5,148	40,247
<b>Total</b>	<b>\$ 49,744</b>	<b>\$ 904,480</b>	<b>\$ 7,875</b>	<b>\$ 962,099</b>
<b>Net derivatives</b>	<b>\$ 111</b>	<b>\$ 11,046</b>	<b>\$ 1,605</b>	<b>\$ 12,762</b>

In the table above, trading assets included derivative instruments designated as hedges of \$3 million as of both June 2023 and December 2022.

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

#### Trading Cash Instruments, Investments and Loans.

The table below presents level 3 trading cash instrument assets, investments and loans and ranges and weighted averages of significant unobservable inputs used to value level 3 trading cash instruments, investments and loans.

<i>\$ in millions, except inputs</i>	As of June 2023		As of December 2022	
	Amount or Range	Weighted Average	Amount or Range	Weighted Average
<b>Trading Cash Instruments</b>				
<b>Mortgages and other asset-backed loans and securities</b>				
Level 3 assets	\$ 68		\$ 49	
Yield	5.9% to 22.5%	13.7%	5.6% to 21.3%	12.5%
Recovery rate	43.0% to 76.0%	50.9%	47.0% to 76.1%	56.6%
Duration (years)	0.1 to 9.0	3.0	1.3 to 8.0	2.4
<b>Corporate debt instruments and government and agency obligations</b>				
Level 3 assets	\$ 368		\$ 444	
Yield	4.7% to 42.1%	11.4%	2.8% to 48.0%	9.2%
Recovery rate	7.3% to 78.0%	36.0%	3.0% to 87.0%	36.7%
Duration (years)	1.0 to 27.5	4.0	0.3 to 12.3	4.6
<b>Equity securities</b>				
Level 3 assets	\$ 27		\$ 63	
Duration (years)	5.3 to 5.3	5.3	5.8 to 5.8	5.8
<b>Total</b>	<b>\$ 463</b>		<b>\$ 556</b>	
<b>Investments</b>				
<b>Corporate debt instruments</b>				
Level 3 assets	\$ 14		\$ 15	
Recovery rate	8.6% to 58.9%	37.2%	10.0% to 57.2%	33.5%
<b>Equity securities</b>				
Level 3 assets	\$ 53		\$ 56	
Multiples	1.5x to 7.1x	6.3x	1.5x to 6.0x	5.3x
<b>Total</b>	<b>\$ 67</b>		<b>\$ 71</b>	
<b>Loans</b>				
<b>Corporate</b>				
Level 3 assets	\$ 55		\$ 54	
Yield	3.5% to 3.5%	3.5%	4.8% to 4.8%	4.8%
Recovery rate	15.0% to 15.0%	15.0%	15.0% to 15.0%	15.0%

In the table above:

- Ranges represent the significant unobservable inputs that were used in the valuation of each type of cash instrument and weighted averages are calculated by weighting each input by the relative fair value of the instrument.
- 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 trading 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 trading cash instruments.
- Increases in yield or duration used in the valuation of level 3 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 June 2023 and December 2022. Due to the distinctive nature of each level 3 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, corporate debt instruments and government and agency obligations and loans 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.

**Derivatives.** The table below presents net level 3 derivatives and ranges, averages and medians of significant unobservable inputs used to value level 3 derivatives.

\$ in millions, except inputs	As of June 2023		As of December 2022	
	Amount or Range	Average/ Median	Amount or Range	Average/ Median
<b>Interest rates, net</b>	\$ 79		\$ 112	
Correlation	(10)% to 26%	13%/25%	(10)% to 26%	13%/25%
Volatility (bps)	42 to 62	52/52	45 to 60	56/57
<b>Credit, net</b>	\$ 1,852		\$ 1,657	
Credit spreads (bps)	9 to 1,864	184/114	5 to 686	167/125
Upfront credit points	(4) to 90	13/2	(1) to 90	19/5
Recovery rates	20% to 50%	42%/40%	20% to 50%	41%/40%
<b>Currencies, net</b>	\$ (61)		\$ (76)	
Correlation	20% to 23%	21%/21%	20% to 23%	21%/21%
<b>Equities, net</b>	\$ (420)		\$ (90)	
Correlation	(70)% to 100%	61%/68%	(75)% to 100%	60%/67%
Volatility	3% to 66%	13%/12%	2% to 74%	16%/18%
<b>Commodities, net</b>	\$ 2		\$ 2	
<b>Total</b>	\$ 1,452		\$ 1,605	

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 equity derivatives is appropriate for valuing a specific equity derivative but may not be appropriate for valuing any other equity 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 and Sensitivity of Fair Value Measurement to Changes in Significant Unobservable Inputs

The range of significant unobservable inputs used to value the company's level 3 derivative instruments and the directional sensitivity of the company's level 3 instruments to changes in significant unobservable inputs are consistent with the information described in Note 29 "Fair Value Measurement" in Part II of the 2022 Annual Report.

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

- **Resale and Repurchase Agreements and Securities Borrowed and Loaned.** As of June 2023 and December 2022, the significant unobservable inputs used to value level 3 resale agreements are incorporated into the trading cash instruments disclosures related to unobservable inputs. See "Trading Cash Instruments, Investments and Loans" and "Derivatives" above. As of both June 2023 and December 2022, there were no level 3 securities borrowed, repurchase agreements and securities loaned.
- **Other Secured Financings.** As of June 2023 and December 2022, the significant unobservable inputs used to value level 3 other secured financings are incorporated into the derivatives and trading cash instruments, investments and loans disclosures related to unobservable inputs. See "Trading Cash Instruments, Investments and Loans" and "Derivatives" above.
- **Unsecured Borrowings.** As of June 2023 and December 2022, the significant unobservable inputs used to value level 3 unsecured borrowings are incorporated into the derivatives and trading cash instruments, investments and loans disclosures related to unobservable inputs. See "Trading Cash Instruments, Investments and Loans" and "Derivatives" above.

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

During both the six months ended June 2023 and six months ended June 2022, there were no significant transfers between level 1 and level 2 financial assets and liabilities measured at fair value on a recurring basis.

## Notes to the Financial Statements (Unaudited)

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

The fair value of financial assets and 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 \$483 million as of June 2023 and \$526 million as of June 2022 for favourable changes, and \$216 million as of June 2023 and \$228 million as of June 2022 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 June 2023 and June 2022, the impact for favourable changes was primarily driven by changes in valuation adjustments related to equity and fixed income derivatives and changes in assumptions related to the valuation of secured funding spreads and equity securities. As of both June 2023 and June 2022, the impact for unfavourable changes was primarily driven by changes in the assumptions related to the valuation of secured funding spreads, volatility and correlation inputs, and credit spreads.

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

<i>\$ in millions</i>	Six Months Ended June	
	2023	2022
Beginning balance	\$ 206	\$ 190
New transactions	131	96
Amounts recognised in the income statement during the period	(113)	(56)
<b>Ending balance</b>	<b>\$ 224</b>	<b>\$ 230</b>

### Level 3 Rollforward

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

<i>\$ in millions</i>	Six Months Ended June	
	2023	2022
<b>Total financial assets</b>		
Beginning balance	\$ 4,728	\$ 5,760
Gains/(losses)	449	(312)
Purchases	306	871
Sales	(258)	(240)
Settlements	(607)	(831)
Transfers into level 3	239	1,239
Transfers out of level 3	(332)	(446)
<b>Ending balance</b>	<b>\$ 4,525</b>	<b>\$ 6,041</b>
<b>Total financial liabilities</b>		
Beginning balance	\$ (7,875)	\$ (18,239)
Gains/(losses)	(747)	2,133
Purchases	11	79
Sales	(239)	(213)
Issuances	(1,369)	(2,775)
Settlements	1,603	3,845
Transfers into level 3	(310)	(937)
Transfers out of level 3	602	617
<b>Ending balance</b>	<b>\$ (8,324)</b>	<b>\$ (15,490)</b>

In the table above:

- 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 liabilities that were transferred out of level 3 prior to the end of the period.
- Level 3 financial assets and liabilities are frequently economically hedged with level 1 and level 2 financial assets and 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.
- Gains/(losses) are predominately attributable to changes in unrealised gains or losses relating to level 3 financial assets and financial liabilities.



## Notes to the Financial Statements (Unaudited)

- The net gains/(losses) on level 3 financial assets for both the six months ended June 2023 and six months ended June 2022 are reported in “Net revenues” in the income statement.
- The net losses on level 3 financial liabilities of \$747 million for the six months ended June 2023 included losses of \$707 million reported in “Net revenues” in the income statement and losses of \$40 million reported in “Debt valuation adjustment” in the statement of comprehensive income. The net gains on level 3 financial liabilities of \$2.13 billion for the six months ended June 2022 included gains of \$1.95 billion reported in “Net revenues” in the income statement and gains of \$188 million reported in “Debt valuation adjustment” in the statement of comprehensive income.

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

\$ in millions	Six Months Ended June	
	2023	2022
<b>Collateralised agreements</b>		
Beginning balance	\$ 118	\$ 121
Gains/(losses)	(2)	(4)
<b>Ending balance</b>	<b>\$ 116</b>	<b>\$ 117</b>
<b>Trading assets</b>		
Beginning balance	\$ 4,485	\$ 5,479
Gains/(losses)	450	(302)
Purchases	306	848
Sales	(258)	(236)
Settlements	(603)	(830)
Transfers into level 3	239	1,232
Transfers out of level 3	(332)	(446)
<b>Ending balance</b>	<b>\$ 4,287</b>	<b>\$ 5,745</b>
<b>Investments</b>		
Beginning balance	\$ 71	\$ 105
Gains/(losses)	—	(4)
Purchases	—	15
Settlements	(4)	(1)
Transfers into level 3	—	7
<b>Ending balance</b>	<b>\$ 67</b>	<b>\$ 122</b>
<b>Loans</b>		
Beginning balance	\$ 54	\$ 55
Gains/(losses)	1	(2)
Purchases	—	8
Sales	—	(4)
<b>Ending balance</b>	<b>\$ 55</b>	<b>\$ 57</b>

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 June	
	2023	2022
<b>Collateralised financings</b>		
Beginning balance	\$ (395)	\$ (380)
Gains/(losses)	(20)	(63)
Issuances	(327)	(47)
Settlements	102	267
<b>Ending balance</b>	<b>\$ (640)</b>	<b>\$ (223)</b>
<b>Trading liabilities</b>		
Beginning balance	\$ (2,332)	\$ (3,722)
Gains/(losses)	(332)	214
Purchases	11	79
Sales	(239)	(213)
Settlements	298	364
Transfers into level 3	(132)	(158)
Transfers out of level 3	315	355
<b>Ending balance</b>	<b>\$ (2,411)</b>	<b>\$ (3,081)</b>
<b>Unsecured borrowings</b>		
Beginning balance	\$ (5,148)	\$ (14,137)
Gains/(losses)	(395)	1,982
Issuances	(1,042)	(2,728)
Settlements	1,203	3,214
Transfers into level 3	(178)	(779)
Transfers out of level 3	287	262
<b>Ending balance</b>	<b>\$ (5,273)</b>	<b>\$ (12,186)</b>

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

Transfers between level 2 and level 3 generally occur due to changes in the transparency of level 3 inputs. A lack of market evidence leads to reduced transparency, whereas an increase in the availability of market evidence leads to an increase in transparency.

### Financial Assets

#### Six Months Ended June 2023

**Trading Assets.** Transfers into level 3 trading assets primarily reflected transfers of certain equity derivatives from level 2, principally due to reduced transparency of certain volatility and correlation inputs, transfers of certain credit derivatives from level 2, principally due to reduced transparency of certain credit spread inputs, and transfers of certain trading cash instruments from level 2, principally due to reduced transparency of certain yield inputs.

Transfers out of level 3 trading assets primarily reflected transfers of certain equity derivatives to level 2, principally due to increased transparency of certain volatility and correlation inputs, and transfers of certain cash instruments to level 2, principally due to increased transparency of certain yield inputs.

**Investments.** Transfers into level 3 investments were not material.

## Notes to the Financial Statements (Unaudited)

### Six Months Ended June 2022

**Trading Assets.** Transfers into level 3 trading assets primarily reflected transfers of certain equity securities from level 2, principally due to reduced price transparency as a result of a lack of market evidence, including fewer market transactions in these instrument.

Transfers out of level 3 trading assets primarily reflected transfers of certain equity derivatives to level 2, principally due to increased transparency of certain volatility and correlation inputs, and transfers of certain trading cash instruments into level 2, principally due to increased transparency of certain yield inputs.

**Investments.** Transfers into level 3 investments primarily reflected transfers of certain cash instruments from level 2, principally due to reduced transparency of certain yield inputs.

### Financial Liabilities

#### Six Months Ended June 2023

**Trading Liabilities.** Transfers into level 3 trading liabilities primarily reflected transfers of certain equity derivatives from level 2, principally due to reduced transparency of certain volatility and correlation inputs, and transfers of certain credit derivatives from level 2, principally due to reduced transparency of certain credit spread inputs.

Transfers out of level 3 trading liabilities primarily reflected transfers of certain equity derivatives to level 2, principally due to increased transparency of certain volatility and correlation inputs, and transfers of certain credit derivatives due to reduced transparency of certain credit spread inputs.

**Unsecured Borrowings.** Transfers into level 3 unsecured borrowings primarily reflected transfers of certain hybrid financial instruments from level 2, principally due to reduced transparency of certain volatility and correlation inputs.

Transfers out of level 3 unsecured borrowings primarily reflected transfers of certain hybrid financial instruments to level 2, principally due to increased transparency of certain volatility and correlation inputs.

#### Six Months Ended June 2022

**Trading Liabilities.** Transfers into level 3 trading liabilities primarily reflected transfers of certain equity derivatives from level 2, principally due to reduced transparency of certain volatility and correlation inputs.

Transfers out of level 3 trading liabilities primarily reflected transfers of certain equity derivatives to level 2, principally due to increased transparency of certain volatility and correlation inputs.

**Unsecured Borrowings.** Transfers into level 3 unsecured borrowings primarily reflected transfers of certain hybrid financial instruments from level 2, principally due to reduced transparency of certain volatility and correlation inputs.

Transfers out of level 3 unsecured borrowings primarily reflected transfers of certain hybrid financial instruments to level 2, principally due to increased transparency of certain volatility and correlation inputs.

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

The company had financial assets of \$239.04 billion as of June 2023 and \$176.67 billion as of December 2022 that are not measured at fair value. Given that substantially all of these balances are short-term in nature, their carrying values in the balance sheet are a reasonable approximation of fair value.

The table below presents the company's financial liabilities that are not measured at fair value by expected maturity.

<i>\$ in millions</i>	As of	
	June 2023	December 2022
Current	\$ 197,157	\$ 144,021
Non-current	64,468	54,314
<b>Total</b>	<b>\$ 261,625</b>	<b>\$ 198,335</b>

In the table above:

- Current financial liabilities are short-term in nature and therefore their carrying values in the balance sheet are a reasonable approximation of fair value.
- Non-current financial liabilities primarily related to long-term intercompany loans and repurchase agreements. The interest rates of these instruments are variable in nature and approximate prevailing market interest rates for instruments with similar terms and characteristics. As such, their carrying values in the balance sheet are a reasonable approximation of fair value.

### Note 23.

## 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.