



Annual Report
November 30, 2019

Goldman Sachs International (unlimited company)
Company Number: 02263951

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Strategic Report

Introduction

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

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

The company's ultimate parent undertaking and controlling entity is The Goldman Sachs Group, Inc. (Group Inc.). Group Inc. is a bank holding company and a financial holding company regulated by the Board of Governors of the Federal Reserve System (FRB). In relation to the company, "group undertaking" means Group Inc. or any of its subsidiaries. Group Inc., together with its consolidated subsidiaries, form "GS Group". GS Group is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. GS Group's purpose is to advance sustainable economic growth and financial opportunity. GS Group's goal, reflected in the *One Goldman Sachs* initiative, is to deliver its full range of services and expertise to support its clients in a more accessible, comprehensive and efficient manner, across business and product areas. GS Group has a presence in EMEA through a number of subsidiaries, including GSI.

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

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

References to "the financial statements" are to the directors' report and audited financial statements as presented in Part II of this annual report.

This annual report has been prepared for the twelve months ended November 30, 2019. In 2018, the company changed its accounting reference date from December 31 to November 30 and prepared an annual report for the eleven months ended November 30, 2018. As a result, amounts prepared in this annual report are not directly comparable. All references to November 2019 refer to the twelve months ended, or the date, as the context requires, November 30, 2019. All references to November 2018 refer to the eleven months ended, or the date, as the context requires, November 30, 2018.

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

Certain disclosures required by U.K. GAAP in relation to the company's financial risk management and capital management have been presented alongside other risk management and regulatory information in the strategic report. Such disclosures are identified as audited. All other information in the strategic report is unaudited.

Executive Overview

Profit and Loss Account

The profit and loss account is set out on page 50 of this annual report. The company's profit for the period ended November 2019 was \$1.80 billion, a decrease of 18% compared with the period ended November 2018.

Net revenues were \$8.10 billion for the period ended November 2019, 3% higher than the period ended November 2018, primarily due to higher net revenues in Institutional Client Services, partially offset by significantly lower net revenues in Investment Management, slightly lower net revenues in Investment Banking and lower net revenues in Investing & Lending.

Administrative expenses were \$5.44 billion for the period ended November 2019, 18% higher than the period ended November 2018, primarily due to significantly higher direct costs of employment, higher brokerage, clearing, exchange and distribution fees, and, to a lesser extent, significantly higher management charges from group undertakings, occupancy and depreciation and amortisation.

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

Strategic Report

Capital Ratios

As of November 2019, the company's Common Equity Tier 1 (CET1) capital ratio was 11.6% under the E.U. Capital Requirements Directive (CRD).

Balance Sheet

The balance sheet is set out on page 51 of this annual report. In the subsequent paragraphs, total assets are the sum of "Fixed assets", "Current assets" and "Pension surplus". Total liabilities are the sum of "Creditors: amounts falling due within one year", "Creditors: amounts falling due after more than one year" and "Provisions for liabilities".

As of November 2019, total assets were \$1.04 trillion, an increase of \$154.15 billion from November 2018, primarily reflecting an increase in financial instruments owned of \$194.28 billion, partially offset by a decrease in collateralised agreements of \$46.99 billion. Financial instruments owned increased primarily due to an increase in derivative instruments, principally as a result of an increase in interest rates derivatives, and an increase in cash instruments. Collateralised agreements decreased primarily due to changes in firm and client activity.

As of November 2019, total liabilities were \$1.01 trillion, an increase of \$153.81 billion from November 2018, reflecting an increase in financial instruments sold, but not yet purchased of \$168.65 billion, partially offset by a decrease in collateralised financings of \$22.06 billion. Financial instruments sold, but not yet purchased increased primarily due to an increase in derivative instruments, principally as a result of an increase in interest rates derivatives, partially offset by a decrease in cash instruments. Collateralised financings decreased primarily due to changes in firm and client activity.

As of November 2019, total shareholder's funds were \$34.25 billion, an increase of \$331 million from November 2018, primarily reflecting the company's profit for the period ended November 2019 of \$1.80 billion and shares issued of \$340 million, partially offset by payment of a dividend of \$1.00 billion and interest net of tax on Additional Tier 1 notes (AT1 notes) of \$542 million.

Total level 3 financial assets were \$5.33 billion as of November 2019 and \$5.31 billion as of November 2018. See Note 28 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 November 2019, total assets were \$393.61 billion and total liabilities were \$367.43 billion. The company's total assets and total liabilities under U.S. GAAP differ from those reported under U.K. GAAP primarily due to the company presenting derivative balances gross under U.K. GAAP if they are not net settled in the normal course of business, even where it has a legally enforceable right to offset those balances.

Future Outlook

The directors consider that the period end financial position of the company was satisfactory. While no significant change in the company's principal business activities is currently expected, the directors continue to assess the impact on the company of the U.K.'s decision to leave the E.U. (Brexit) and the global outbreak of a novel strain of coronavirus (COVID-19).

During the Brexit transition period that will last until the end of December 2020, the company will continue to benefit from non-discriminatory access to E.U. clients and infrastructure. In the event that the company loses access to E.U. markets on December 31, 2020, the company expects that some of its E.U. client base will be serviced by other E.U. subsidiaries of Group Inc. The extent to which this happens will depend upon the applicable framework at the end of the transition period and the extent to which the company can continue to service its clients via third country branches and rely on national cross-border access regimes. See "Regulatory Matters and Other Developments — Other Developments" below for further information.

As at the time of publication, the COVID-19 outbreak is resulting in various governments putting restrictions in place regarding the movement of people and causing widespread disruption to financial markets and normal patterns of business activity across the world, including the U.K. This has led to significant market volatility and accommodative monetary policies by global central banks and the company has activated business continuity planning (BCP) strategies to safeguard the well-being of employees, the continued operation of critical functions and support of its clients. The extent of the impact of COVID-19 on the company's operational and financial performance, will depend on future developments including the duration and continued spread of the outbreak.

Strategic Report

Business Environment

During the period ended November 2019, global economic activity appeared to decrease compared with the period ended November 2018, reflecting decreased growth in both emerging markets and advanced economies, including in the U.S. Concerns about future global growth and a mixed macroeconomic environment led to accommodative monetary policies by global central banks, including three cuts to the federal funds rate by the U.S. Federal Reserve during the period ended November 2019 to a target range of 1.5% to 1.75%. The market sentiment in the period ended November 2019 was also impacted by geopolitical uncertainty, including ongoing trade concerns between the U.S. and China, and multiple extensions of the Brexit deadline.

Results of Operations

Net Revenues

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

Segment Reporting

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

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Investment Banking		
Financial advisory	\$ 742	\$ 693
Underwriting	775	871
Total Investment Banking	\$1,517	\$1,564
Institutional Client Services		
Fixed Income, Currency and Commodities (FICC)		
Client Execution	\$2,768	\$2,353
Equities	2,739	2,640
Total Institutional Client Services	\$5,507	\$4,993
Investing & Lending	\$ 501	\$ 532
Investment Management	\$ 571	\$ 777
Total net revenues	\$8,096	\$7,866

The company updated its methodology for allocating funding costs, reported within net revenues, to its segments. As a result, in the table above, comparatives have been updated to conform to the current period presentation, with no impact to total net revenues.

The composition of the company’s segments has been described in the paragraphs below, with commentary on variances provided for the company’s significant segments, which are Investment Banking and Institutional Client Services.

Investment Banking

Investment Banking consists of:

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

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

November 2019 versus November 2018. Net revenues in Investment Banking were \$1.52 billion for the period ended November 2019, 3% lower than the period ended November 2018, reflecting lower net revenues in Underwriting, partially offset by higher net revenues in Financial advisory.

The decrease in Underwriting reflected significantly lower net revenues in equity underwriting, partially offset by higher net revenues in debt underwriting. The increase in Financial advisory reflected an increase in completed mergers and acquisitions transactions.

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

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

Strategic Report

Institutional Client Services

Institutional Client Services generates revenues in the following ways:

- In large, highly liquid markets, the company executes a high volume of transactions for clients;
- In less liquid markets, the company executes transactions for clients for spreads and fees that are generally somewhat larger than those charged in more liquid markets;
- The company also structures and executes transactions involving customised or tailor-made products that address clients' risk exposures, investment objectives or other complex needs;
- The company provides financing to its clients for their securities trading activities, as well as securities lending and other prime brokerage services; and

In connection with the company's market-making activities, the company maintains inventory, typically for a short period of time, in response to, or in anticipation of, client demand. The company also holds inventory to actively manage its risk exposures that arise from these market-making activities. The company carries its inventory at fair value with changes in valuation reflected in net revenues.

Institutional Client Services consists of:

FICC Client Execution. Includes client execution activities related to making markets in both cash and derivative instruments for interest rate products, credit products, mortgages, currencies and commodities.

- **Interest Rate Products.** Government bonds (including inflation-linked securities) across maturities, other government-backed securities, securities sold under agreements to repurchase (repurchase agreements), and interest rate swaps, options and other derivatives.
- **Credit Products.** Investment-grade corporate securities, high-yield securities, credit derivatives, exchange-traded funds (ETFs), bank and bridge loans, municipal securities, emerging market and distressed debt, and trade claims.
- **Mortgages.** Commercial mortgage-related securities, loans and derivatives, residential mortgage-related securities, loans and derivatives, and other asset-backed securities, loans and derivatives.
- **Currencies.** Currency options, spot/forwards and other derivatives on G-10 currencies and emerging market products.
- **Commodities.** Commodity derivatives and, to a lesser extent, physical commodities, involving crude oil and petroleum products, natural gas, base, precious and other metals, electricity, coal, agricultural and other commodity products.

Equities. Includes client execution activities related to making markets in equity products and commissions and fees from executing and clearing institutional client transactions on major stock, options and futures exchanges worldwide, as well as over-the-counter (OTC) transactions. Equities also includes the securities services business, which provides financing, securities lending and other prime brokerage services to institutional clients, including hedge funds, mutual funds, pension funds and foundations, and generates revenues primarily in the form of interest rate spreads or fees.

The company's results are influenced by a combination of interconnected drivers, including (i) client activity levels and transactional bid/offer spreads, and (ii) changes in the fair value of its inventory, and interest income and interest expense related to the holding, hedging and funding of its inventory.

November 2019 versus November 2018. Net revenues in Institutional Client Services were \$5.51 billion for the period ended November 2019, 10% higher than the period ended November 2018.

Net revenues in FICC Client Execution were \$2.77 billion for the period ended November 2019, 18% higher than the period ended November 2018, due to higher net revenues in interest rate products and currencies, significantly higher net revenues in commodities and, to a lesser extent, higher net revenues in credit products and mortgages.

Net revenues in Equities were \$2.74 billion for the period ended November 2019, 4% higher than the period ended November 2018, due to higher net revenues in commission and fees and equities client execution, partially offset by lower net revenues in securities services.

Investing & Lending

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

Investment Management

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

Geographic Data

See Note 5 to the financial statements for a summary of the company's net revenues by geographic region.

Strategic Report

Administrative Expenses

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

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

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Direct costs of employment	\$2,394	\$1,945
Brokerage, clearing, exchange and distribution fees	907	767
Market development	94	81
Communications and technology	122	112
Depreciation and amortisation	116	58
Occupancy	226	157
Professional fees	186	203
Management charges from group undertakings	919	802
Management charges to group undertakings	(370)	(387)
Other expenses	846	869
Total administrative expenses	\$5,440	\$4,607
Headcount at period-end	4,230	4,210

In the table above, direct costs of employment included a charge of \$175 million for the period ended November 2019 and a credit of \$184 million for the period ended November 2018 relating to the mark-to-market of share-based compensation.

November 2019 versus November 2018. Administrative expenses were \$5.44 billion for the period ended November 2019, 18% higher than the period ended November 2018.

Direct costs of employment were \$2.39 billion for the period ended November 2019, 23% higher than the period ended November 2018. Excluding the mark-to-market of share-based compensation for both periods, direct costs of employment were \$2.22 billion for the period ended November 2019, 4% higher than the period ended November 2018.

Brokerage, clearing, exchange and distribution fees were \$907 million for the period ended November 2019, 18% higher than the period ended November 2018, reflecting an increase in activity levels.

Depreciation and amortisation expenses were \$116 million for the period ended November 2019, \$58 million higher than the period ended November 2018, primarily due to an increase in intangible fixed assets (computer software).

Occupancy and management charges from group undertakings collectively were \$1.15 billion for the period ended November 2019, 19% higher than the period ended November 2018, primarily due to non-recurring expenses incurred as a result of the company consolidating its London activities in its new European headquarters at Plumtree Court.

As of November 2019, headcount was essentially unchanged compared with November 2018.

Interest Payable and Similar Expenses

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

November 2019 versus November 2018. Interest payable and similar expenses was \$243 million for the period ended November 2019, 3% higher than the period ended November 2018.

Tax on Profit

The effective tax rate was 25.7% for the period ended November 2019, which compares to the U.K. corporation tax rate applicable to the company of 27.0%. The effective tax rate represents the company's tax on profit divided by its profit before taxation.

Strategic Report

Balance Sheet and Funding Sources

Balance Sheet Management

One of the company's risk management disciplines is its ability to manage the size and composition of its balance sheet. The company leverages the firmwide balance sheet management process performed at the GS Group level to manage these factors. While the asset base of 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 equity capital held and (iii) the company's funding profile, among other factors. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" for information about the company's equity capital management process.

In order to ensure appropriate risk management, the company seeks to maintain a sufficiently liquid balance sheet and leverages GS Group's processes to dynamically manage its assets and liabilities, which include (i) balance sheet planning, (ii) balance sheet limits, (iii) monitoring of key metrics and (iv) scenario analyses.

Balance Sheet Planning. GS Group prepares a balance sheet plan that combines projected total assets and composition of assets with expected funding sources over a three-year time horizon. This plan is reviewed quarterly and may be adjusted in response to changing business needs or market conditions.

Balance Sheet Limits. The limits are set at levels, which are close to actual operating levels, rather than at levels which reflect GS Group's maximum risk appetite, in order to ensure prompt escalation and discussion among GS Group's revenue-producing units, Treasury and GS Group's independent risk oversight and control functions on a routine basis. GS Group's Firmwide Asset Liability Committee and GS Group's Risk Governance Committee review and approve balance sheet limits. Additionally, GS Group's Risk Governance Committee sets aged limits for certain financial instruments as a disincentive to hold such positions over longer periods of time. Requests for changes in limits are evaluated after giving consideration to their impact on GS Group's key metrics. Compliance with limits is monitored by the revenue-producing units and Treasury, as well as the independent risk oversight and control functions.

Monitoring of Key Metrics. Key balance sheet metrics are monitored both by business and on a GS Group basis, including asset and liability size and composition, limit utilisation and risk measures. Assets are allocated to businesses and movements resulting from new business activity as well as market fluctuations are reviewed and analysed.

Scenario Analyses. GS Group conducts scenario analyses for Group Inc. and its subsidiaries to determine how it would manage the size and composition of the balance sheet. These scenarios cover short- and long-term time horizons using various macroeconomic and GS Group-specific assumptions, based on a range of economic scenarios.

Funding Sources

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

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

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

\$ in millions	As of November			
	2019		2018	
Collateralised financings	\$130,087	52%	\$152,145	56%
Intercompany unsecured borrowings	64,311	25%	61,493	23%
External unsecured borrowings	23,139	9%	25,197	9%
Total shareholder's funds	34,248	14%	33,917	12%
Total funding sources	\$251,785	100%	\$272,752	100%

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

Secured Funding. The company funds a significant amount of inventory on a secured basis, with external counterparties, as well as with affiliates. Secured funding includes collateralised financings in the balance sheet.

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The company may also pledge its inventory as collateral for securities borrowed under a securities lending agreement. The company also uses its own inventory to cover transactions in which the company or its clients have sold securities that have not yet been purchased. Secured funding is less sensitive to changes in Group Inc. and/or the company's credit quality than unsecured funding, due to the posting of collateral to lenders. Nonetheless, the company analyses the refinancing risk of its secured funding activities, taking into account trade tenors, maturity profiles, counterparty concentrations, collateral eligibility and counterparty rollover probabilities. The company seeks to mitigate its refinancing risk by executing term trades with staggered maturities, diversifying counterparties, raising excess secured funding and pre-funding residual risk through the Global Core Liquid Assets (GCLA).

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

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

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

Intercompany Unsecured Borrowings. The company sources funding through intercompany unsecured borrowings, primarily from its immediate parent undertaking, Goldman Sachs Group UK Limited, and Goldman Sachs Funding LLC (Funding IHC).

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

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

Shareholder's Funds. Shareholder's funds is a stable and perpetual source of funding. See Notes 21 and 22 to the financial statements for further information.

Equity Capital Management and Regulatory Capital

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

Equity Capital Management (Audited)

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

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

In addition, as part of the company's comprehensive capital management policy, a contingency capital plan is maintained that provides a framework for analysing and responding to a perceived or actual capital deficiency, including, but not limited to, identification of drivers of a capital deficiency, as well as mitigants and potential actions. It outlines the appropriate communication procedures to follow during a crisis period, including internal dissemination of information, as well as timely communication with external stakeholders.

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Regulatory Capital (Audited)

The company is subject to the capital framework for E.U.-regulated financial institutions prescribed in the CRD and the E.U. Capital Requirements Regulation (CRR). These capital regulations are 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, and its member jurisdictions implement regulations based on its standards and guidelines. During the Brexit transition period, the current E.U. rules on prudential regulation will continue to apply to the company. The U.K. government is introducing legislation to ensure that the current prudential rules will continue to apply from January 1, 2021.

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.

The CET1 capital, Tier 1 capital and Total capital ratio requirements (collectively, the Pillar 1 capital requirements) are supplemented by:

- A capital conservation buffer of 2.5% of RWAs, consisting entirely of capital that qualifies as CET1 capital, which was fully phased in by January 1, 2019.
- A countercyclical capital buffer of up to 2.5% (and also consisting entirely of CET1 capital) in order to counteract excessive credit growth. The buffer only applies to the company's exposures to certain types of counterparties based in jurisdictions which have announced a countercyclical buffer. The buffer added 0.32% to the company's CET1 capital ratio requirement as of November 2019. The countercyclical capital buffer applicable to the company could change in the future and, as a result, the company's risk-based capital requirements could change.
- The individual capital requirement under Pillar 2A (an additional amount to cover risks not adequately captured in Pillar 1). The PRA performs a periodic supervisory review of the company's ICAAP, which leads to a final determination by the PRA of the individual capital requirement under Pillar 2A. This is a point in time assessment of the minimum amount of capital the PRA considers that a firm should hold.

On March 11, 2020, the Bank of England announced that it had reduced the U.K. countercyclical capital buffer from 1% to 0% of banks' exposures to U.K. borrowers and counterparties with effect from March 11, 2020. This rate is expected to apply to the company for at least two years and result in the company's CET1 capital ratio requirement decreasing by approximately 0.20%.

Regulatory Risk-Based Capital Ratios

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

	As of November	
	2019	2018
CET1 capital ratio	8.8%	8.1%
Tier 1 capital ratio	10.7%	10.1%
Total capital ratio	13.4%	12.7%

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

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

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

\$ in millions	As of November	
	2019	2018
Risk-based capital and RWAs		
CET1 capital	\$ 24,082	\$ 23,899
Additional Tier 1 notes	\$ 8,300	\$ 8,300
Tier 1 capital	\$ 32,382	\$ 32,199
Tier 2 capital	\$ 5,377	\$ 5,377
Total capital	\$ 37,759	\$ 37,576
RWAs	\$206,768	\$206,007
Risk-based capital ratios		
CET1 capital ratio	11.6%	11.6%
Tier 1 capital ratio	15.7%	15.6%
Total capital ratio	18.3%	18.2%

During the periods ended November 2019 and November 2018, the company was in compliance with the capital requirements set by the PRA.

Certain prudential rules are subject to additional guidance and clarifications, which will be issued by the company's supervisors. All capital, RWAs and estimated ratios are based on current interpretation, expectations and understanding of the applicable rules and may evolve as the interpretation and application is discussed with the company's regulators.

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Risk-Based Capital (Audited)

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

\$ in millions	As of November	
	2019	2018
Called up share capital	\$ 590	\$ 582
Share premium account	5,196	4,864
Retained earnings	20,330	20,070
Accumulated other comprehensive income	(168)	101
Deductions	(1,866)	(1,718)
CET1 capital	24,082	23,899
Additional Tier 1 notes	8,300	8,300
Tier 1 capital	\$32,382	\$32,199
Tier 2 and Total capital		
Long-term subordinated loans	\$ 5,377	\$ 5,377
Tier 2 capital	5,377	5,377
Total capital	\$37,759	\$37,576

Risk-Weighted Assets

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

\$ in millions	As of November	
	2019	2018
Credit RWAs	\$106,329	\$107,554
Market RWAs	85,031	84,349
Operational RWAs	15,408	14,104
Total	\$206,768	\$206,007

Credit Risk. Credit RWAs are calculated based upon measures of exposure, which are then risk weighted. The exposure amount is generally based on the following:

- For on-balance-sheet assets, the carrying value; and
- For off-balance-sheet exposures, including commitments and guarantees, a credit equivalent exposure amount is calculated based on the notional amount of each exposure multiplied by a credit conversion factor.

Counterparty credit risk is a component of total credit risk, and includes credit exposure arising from derivatives, securities financing transactions and margin loans.

Market Risk. Trading book positions are subject to market risk capital requirements which are based either on predetermined levels set by regulators or on internal models. The market risk regulatory capital rules require that a firm obtains the prior written approval of its regulators before using any internal model to calculate its risk-based capital requirement.

RWAs for market risk are computed based on measures of exposures which include the following internal models: Value-at-Risk (VaR); Stressed VaR (SVaR); Incremental Risk; and the Comprehensive Risk Measure (for PRA purposes this is the All Price Risk Measure and is subject to a floor). See "Market Risk Management — Risk Measures" for information about VaR. In addition, Standardised Rules, in accordance with the CRR, are used to compute RWAs for market risk for certain securitised and non-securitised positions by applying risk-weighting factors predetermined by regulators to positions after applicable netting is performed. RWAs for market risk are the sum of each of these measures multiplied by 12.5.

Operational Risk. The company's capital requirements for operational risk are currently calculated under the Standardised approach. The Standardised approach requires companies to divide their activities into eight defined business lines or categories. Each business line is assigned a beta factor which is applied to the three-year average revenues of that business line (with certain prescribed exceptions, such as extraordinary income). Expenses are not included in the calculation. The sum of the individual business line requirements is multiplied by 12.5 to derive the operational RWAs.

Concentration Risk. Under the CRR, institutions are required to monitor and control their large exposures. The large exposure framework is designed to limit the risk of over-reliance on an individual counterparty or a group of connected counterparties. There is a general limit applied to all of the institution's exposures to a single counterparty or groups of connected counterparties, which is set at 25% of eligible capital. The framework includes reporting requirements, hard limits and additional concentration capital charges for trading book large exposures. As of November 2019 and November 2018, the company had no concentration risk capital requirements.

Strategic Report

Leverage Ratio

The company is required to monitor and disclose its leverage ratio using the CRR's definition of exposure. The CRR establishes a 3% minimum leverage ratio requirement for certain E.U. financial institutions, including the company. The company expects this requirement to be incorporated into U.K. legislation before the end of the Brexit transition period. This requirement will begin to apply in June 2021. This leverage ratio compares the CRR's definition of Tier 1 capital to a measure of leverage exposure, defined as the sum of certain assets plus certain off-balance-sheet exposures (which include a measure of derivatives, securities financing transactions, commitments and guarantees), less Tier 1 capital deductions.

The table below presents information about the company's leverage ratio.

<i>\$ in millions</i>	As of November	
	2019	2018
Tier 1 capital	\$ 32,382	\$ 32,199
Leverage exposure	\$740,306	\$771,438
Leverage ratio	4.4%	4.2%

In the table above, the leverage ratio as of November 2019 increased compared with November 2018, primarily due to a decrease in the company's leverage exposure.

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

Minimum Requirement for Own Funds and Eligible Liabilities

The company is subject to a minimum requirement for own funds and eligible liabilities (MREL) issued to affiliates. This requirement is subject to a transitional period which began to phase in from January 1, 2019 and will become fully effective on January 1, 2022. The company's regulatory capital and a portion of its intercompany borrowings, which have been amended to meet subordination and maturity requirements, serve to meet its MREL requirement.

As of November 2019, the company's MREL was \$51.05 billion, which is in excess of its minimum transitional requirement and consists of the company's total regulatory capital of \$37.76 billion and eligible senior intercompany borrowings of \$13.29 billion.

Regulatory Matters and Other Developments

Regulatory Matters

The company's businesses are subject to extensive regulation and supervision worldwide. Regulations have been adopted or are being considered by regulators and policy-makers. The expectation is that the principal areas of impact from regulatory reform for the company will be increased regulatory capital requirements and increased regulation and restriction on certain activities. However, given that many of the new and proposed rules are highly complex, the full impact of regulatory reform will not be known until the rules are implemented and market practices develop under the final E.U. and/or U.K. regulations.

As a result of Brexit the company expects considerable change in the regulatory framework that will govern transactions and business undertaken by the company.

Risk-Based Capital Ratios. In June 2019, amendments to the CRR and CRD were published in the Official Journal of the E.U.

The amendments to the CRR include changes to rules for the leverage ratio, the net stable funding ratio, MREL, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, and reporting and disclosure requirements. Most of the amendments to the CRR will apply from June 28, 2021. The amendments for MREL are already effective. The implementation timing of the market risk revisions is dependent on technical standards, which have yet to be finalised. The company expects that binding market risk rules will not apply before 2023.

The amendments to the CRD include provisions on financial holding companies, remuneration, interest rate risk management, supervisory powers and macro-prudential capital requirements. The U.K., as an E.U. member state at the time of the publication of the amendments in the Official Journal of the E.U., is required to adopt the amendments to the CRD. The amendments to the CRD will be phased in over time with most changes applicable from June 28, 2021, some macro prudential measures applicable from January 1, 2022 and the requirement to have an intermediate E.U. parent holding company applicable from December 30, 2023.

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The Basel Committee published standards in December 2017 that it described as the finalisation of the Basel III post-crisis regulatory reforms. These standards set a floor on internally developed capital requirements at a percentage of the capital requirements under the standardised approach. They also revised the Basel Committee's standardised and model-based approaches for credit risk and provide a new standardised approach for operational risk capital. In November 2019, the Basel Committee proposed further revisions to the framework for credit valuation adjustment (CVA) risk. The Basel Committee has proposed that national regulators implement these standards beginning January 1, 2022, and that the new floor be phased in through January 1, 2027.

The Basel Committee's standards are not effective in any jurisdiction until rules implementing such standards have been implemented by the relevant regulators in such jurisdiction.

The impact of the latest Basel Committee developments on the company (including its RWAs and regulatory capital ratios) is subject to uncertainty until corresponding legislation is implemented.

Compensation Practices. In the E.U., the CRR and CRD include compensation provisions designed to implement the Financial Stability Board's compensation standards. These rules have been implemented by E.U. member states and, among other things, limit the ratio of variable to fixed compensation of certain employees, including those identified as having a material impact on the risk profile of E.U.-regulated entities, including the company. Amendments to the CRR and CRD change certain aspects of these rules, including, among other things, by increasing minimum compensation deferral periods.

Other Developments

Brexit. The E.U. and the U.K. agreed to a withdrawal agreement (the Withdrawal Agreement), which became effective on January 31, 2020 when the U.K. ceased to be an E.U. member state. The transition period under the Withdrawal Agreement will last until the end of December 2020 to allow the E.U. and the U.K. to negotiate a future trade agreement. The Withdrawal Agreement provides for the possibility of an extension of the transition period for either one or two more years. However, the U.K. has pledged not to extend the transition period beyond December 31, 2020. During the transition period, the U.K. will be treated as if it were a member state of the E.U. and therefore the company will still benefit from non-discriminatory access to E.U. clients and infrastructure. At the end of the transition period, firms established in the U.K., including the company, are expected to lose their pan-E.U. "passports" and generally to be treated like entities in countries outside the E.U., whose access to the E.U. are governed by E.U. and national law and may depend on the making of E.U. equivalence decisions or on their obtaining licences or exemptions under national regimes, subject to any other arrangements such as a free trade agreement. After the end of the transition period, and subject to the arrangements surviving following that period, the U.K. may not be required to continue to apply E.U. financial services legislation and may not adopt rules that correspond to E.U. legislation not already operative in the U.K. by then (such as some parts of the 2019 E.U. capital requirements regulation).

Based upon the existing non-E.U. country equivalence regimes, the E.U. and the U.K. have agreed to complete their assessments of equivalence by the end of June 2020. There is significant uncertainty as to whether the outcome of those assessments will be published before the end of the transition period, and whether U.K. firms can rely upon the availability of equivalence in their post-transition planning. GS Group continues to prepare for a scenario where U.K. financial services firms will lose access to E.U. markets on December 31, 2020 (a "hard" Brexit) while ensuring it remains flexible and well positioned to allow its clients to benefit from any more favourable scenarios. GS Group's planning also recognises that after the end of the transition period, it can rely on a degree of continuing access for its U.K. entities pursuant to national cross-border access regimes in certain jurisdictions (for example, based on specific licences or exemptions).

GS Group's plan to manage a hard Brexit scenario involves transition of certain activities currently conducted by the company to new and/or different legal entities; working with clients and counterparties to redocument transactions so they face one of GS Group's E.U. legal entities; changes to GS Group infrastructure; obtaining and developing new real estate; and, in some cases, moving staff to offices in the E.U.

Strategic Report

A meaningful portion of the company's Institutional Client Services and Investment Banking clients are classified as professionals or eligible counterparties in specific jurisdictions and may choose to continue being serviced by, and to continue to transact with, the U.K. service providers and entities under domestic arrangements provided by individual member states (licences or exemptions). The company expects to continue providing products and services in this manner to the extent that clients prefer such coverage and it is available. Such clients could continue to face the company and the company has applied for the applicable cross-border licences and exemptions where these are available. The company also plans to have authorised third country branches in the E.U. which will be used for Institutional Client Services business with domestic clients in the jurisdictions in which those branches are authorised.

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

Central banks and regulators in a number of major jurisdictions (for example, U.S., U.K., E.U., Switzerland and Japan) have convened working groups to find, and implement the transition to, suitable replacements for IBORs. The FCA, which regulates LIBOR, has announced that it will not compel panel banks to contribute to LIBOR after 2021.

Market-led working groups in major jurisdictions, noted above, have already selected their preferred alternative risk-free reference rates and have published and are expected to continue to publish consultations on issues, including methodologies for fallback provisions in contracts and financial instruments linked to IBORs and the development of term structures for alternative risk-free reference rates, which will be critical for financial markets to transition to the use of alternative risk-free reference rates in place of IBORs.

The company has exposure to IBORs, including in financial instruments and contracts that mature after 2021. The company's exposures arise from securities it holds in connection with market-making activities, as well as derivatives it enters into to make markets for its clients and hedge its risks. The company also has exposures to IBORs in the floating-rate securities and other funding products it issues.

GS Group and the company are seeking to facilitate an orderly transition from IBORs to alternative risk-free reference rates for itself and its clients. Accordingly, GS Group has created a programme, which includes the company, which focuses on:

- Evaluating and monitoring the impacts across its businesses, including transactions and products;
- Identifying and evaluating the scope of existing financial instruments and contracts that may be affected, and the extent to which those financial instruments and contracts already contain appropriate fallback language or would require amendment, either through bilateral negotiation or using industry-wide tools, such as protocols;
- Enhancements to infrastructure (for example, models and systems) to prepare for a smooth transition to alternative risk-free reference rates;
- Active participation in central bank and sector working groups, including responding to industry consultations; and
- Client education and communication.

As part of this programme, GS Group has sought to systematically identify the risks inherent in this transition, including financial risks (for example, earnings volatility under stress due to widening swap spreads and the loss of funding sources as a result of counterparties' reluctance to participate in transitioning their positions) and non-financial risks (for example, the inability to negotiate fallbacks with clients and/or counterparties, the potential for disputes relating to the interpretation and implementation of fallback provision and operational impediments for the transition). GS Group is engaged with a range of industry and regulatory working groups (for example, International Swap Dealers Association, the Bank of England's Working Group on Sterling Risk Free Reference Rates and the Federal Reserve's Alternative Reference Rates Committee) and the company will continue to engage with its clients and counterparties to facilitate an orderly transition to alternative risk-free reference rates.

The markets for alternative risk-free reference rates continue to develop and as they develop the company expects to transition to these alternative risk-free reference rates. Where liquidity allows, the company has begun this transition, including execution of Sterling Overnight Index Average based derivative contracts to make markets and facilitate client activities.

Strategic Report

Principal Risks and Uncertainties

The company faces a variety of risks that are substantial and inherent in its businesses including market, liquidity, credit, operational, model, legal, regulatory and reputational risks and uncertainties. The following are some of the more important factors that could affect the company's businesses.

Economic and Market Conditions

The company's businesses, by their nature, do not produce predictable earnings and are materially affected by conditions in the global financial markets and economic conditions generally, both directly and through their impact on client activity levels and creditworthiness. These conditions can change suddenly and negatively.

The company's financial performance is highly dependent on the environment in which its businesses operate. A favourable business environment is generally characterised by, among other factors, high global gross domestic product growth, regulatory and market conditions that result in transparent, liquid and efficient capital markets, low inflation, high business and investor confidence, stable geopolitical conditions, clear regulations and strong business earnings.

Unfavourable or uncertain economic and market conditions can be caused by: declines in economic growth, business activity or investor, business or consumer confidence; limitations on the availability or increases in the cost of credit and capital; illiquid markets; increases in inflation, interest rates, exchange rate or basic commodity price volatility or default rates; concerns about sovereign defaults; uncertainty concerning fiscal or monetary policy; the extent of and uncertainty about tax and other regulatory changes; the imposition of tariffs or other limitations on international trade and travel; outbreaks of domestic or international tensions or hostilities, terrorism, nuclear proliferation, cybersecurity threats or attacks and other forms of disruption to or curtailment of global communication, energy transmission or transportation networks or other geopolitical instability or uncertainty, such as corporate, political or other scandals that reduce investor confidence in capital markets; extreme weather events or other natural disasters or pandemics; or a combination of these or other factors.

The financial services industry and the securities and other financial markets have been materially and adversely affected in the past by significant declines in the values of nearly all asset classes, by a serious lack of liquidity and by high levels of borrower defaults. In addition, concerns about European sovereign debt risk and its impact on the European banking system, the impact of Brexit, the imposition of tariffs and actions taken by other countries in response, and changes in interest rates and other market conditions or actual changes in interest rates and other market conditions, have resulted, at times, in significant volatility while negatively impacting the levels of client activity.

General uncertainty about economic, political and market activities, and the scope, timing and impact of regulatory reform, as well as weak consumer, investor and chief executive officer confidence resulting in large part from such uncertainty, has in the past negatively impacted client activity, which can adversely affect many of the company's businesses. Periods of low volatility and periods of high volatility combined with a lack of liquidity, have at times had an unfavourable impact on the company's market-making businesses.

Financial institution returns in many countries may be negatively impacted by increased funding costs due in part to the lack of perceived government support of such institutions in the event of future financial crises relative to financial institutions in countries in which governmental support is maintained. In addition, liquidity in the financial markets has also been negatively impacted as market participants and market practices and structures continue to adjust to new regulations.

The company's revenues and profitability and those of its competitors have been and will continue to be impacted by requirements relating to capital, additional loss-absorbing capacity, leverage, minimum liquidity and long-term funding levels, requirements related to resolution and recovery planning, derivatives clearing and margin rules and levels of regulatory oversight, as well as limitations on which and, if permitted, how certain business activities may be carried out by financial institutions.

Strategic Report

Regulation

As a participant in the financial services industry and a subsidiary of a systemically important financial institution, the company is subject to extensive regulation, principally in the U.K., and the E.U. more generally, but also in the U.S. as a subsidiary of Group Inc. and in certain other jurisdictions. The company faces the risk of significant intervention by law enforcement, regulatory and tax authorities, as well as private litigation, in all jurisdictions in which it conducts its businesses. In many cases, the company's activities have been and may continue to be subject to overlapping and divergent regulation in different jurisdictions. Among other things, as a result of law enforcement authorities, regulators or private parties challenging the company's compliance with laws and regulations, the company or its employees have been and could be fined, criminally charged or sanctioned, prohibited from engaging in certain business activities, subjected to limitations or conditions on its business activities including higher capital requirements, or subjected to new or substantially higher taxes or other governmental charges in connection with the conduct of its businesses or with respect to its employees. These limitations or conditions may limit business activities and negatively impact the company's profitability.

In addition to the impact on the scope and profitability of the company's business activities, day-to-day compliance with laws and regulations has involved and will, except to the extent that some of these regulations are modified or otherwise repealed, continue to involve significant amounts of time, including that of the company's senior leaders and that of a large number of dedicated compliance and other reporting and operational personnel, all of which may negatively impact the company's profitability.

If there are new laws or regulations or changes in the enforcement of existing laws or regulations applicable to the company's businesses or those of the company's clients, including capital, liquidity, leverage, long-term debt, total loss-absorbing capacity (TLAC) and margin requirements, restrictions on other business practices, reporting requirements, requirements relating to the implementation of the E.U. Bank Recovery and Resolution Directive, tax burdens and compensation restrictions, that are imposed on a limited subset of financial institutions (whether based on size, method of funding, activities, geography or other criteria) which may include the company or GS Group, compliance with these new laws and regulations, or changes in the enforcement of existing laws or regulations, could adversely affect the company's ability to compete effectively with other institutions that are not affected in the same way. In addition, regulation imposed on financial institutions or market participants generally, such as taxes on financial transactions, could adversely impact levels of market activity more broadly, and thus impact the company's businesses.

These developments could impact the company's profitability in the affected jurisdictions, or even make it uneconomic to continue to conduct all or certain businesses in those jurisdictions, or could result in the company incurring significant costs associated with changing business practices, restructuring businesses, moving all or certain businesses and employees to other locations or complying with applicable capital requirements, including liquidating assets or raising capital in a manner that adversely increases the company's funding costs or otherwise adversely affects its shareholder and creditors.

The implementation of higher capital requirements, the liquidity coverage ratio, the net stable funding ratio, requirements relating to long-term debt and TLAC and the prohibition on proprietary trading and the sponsorship of, or investment in, covered funds by the Volcker Rule may continue to adversely affect the company's profitability and competitive position, particularly if these requirements do not apply, or do not apply equally, to the company's competitors or are not implemented uniformly across jurisdictions.

The company is also subject to laws and regulations relating to the privacy of the information of clients, employees or others, and any failure to comply with these laws and regulations could expose the company to liability and/or reputational damage. As new privacy-related laws and regulations are implemented, the time and resources needed for the company to comply with such laws and regulations, as well as the company's potential liability for non-compliance and reporting obligations in the case of data breaches, may significantly increase.

In addition, the company's businesses are increasingly subject to laws and regulations relating to surveillance, encryption and data on-shoring in the jurisdictions in which the company operates. Compliance with these laws and regulations may require the company to change its policies, procedures and technology for information security, which could, among other things, make the company more vulnerable to cyber attacks and misappropriation, corruption or loss of information or technology.

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Increasingly, regulators and courts have sought to hold financial institutions liable for the misconduct of their clients where such regulators and courts have determined that the financial institution should have detected that the client was engaged in wrongdoing, even though the financial institution had no direct knowledge of the activities engaged in by its client. Regulators and courts have also increasingly found liability as a “control person” for activities of entities in which financial institutions or funds controlled by financial institutions have an investment, but which they do not actively manage. In addition, regulators and courts continue to seek to establish “fiduciary” obligations to counterparties to which no such duty had been assumed to exist. To the extent that such efforts are successful, the cost of, and liabilities associated with, engaging in brokerage, clearing, market-making, prime brokerage, investing and other similar activities could increase significantly. To the extent that the company has fiduciary obligations in connection with acting as a financial adviser or investment adviser or in other roles for individual, institutional, sovereign or investment fund clients, any breach, or even an alleged breach, of such obligations could have materially negative legal, regulatory and reputational consequences.

For information about regulatory developments, which are relevant to the company’s businesses, see “Regulatory Matters and Other Developments — Regulatory Matters”.

Brexit

On January 31, 2020, the U.K. left the E.U. As discussed in “Regulatory Matters and Other Developments — Other Developments” the company expects considerable change in the regulatory framework that will govern transactions and business undertaken by the company in the E.U. As a result, the company faces numerous risks that could adversely affect the conduct of its businesses, its profitability and liquidity. In addition, as a result of establishing third country branches in anticipation of a “hard” Brexit, the company will be subject to additional regulation and supervision in those jurisdictions.

The company is incorporated and headquartered in the U.K., and currently benefits from non-discriminatory access to E.U. clients and infrastructure based on E.U. treaties and E.U. legislation, including arrangements for cross-border “passporting” and the establishment of E.U. branches. The E.U. and the U.K. Parliament have ratified the Withdrawal Agreement, which provides for a transition period for the U.K. and the E.U. to negotiate and agree to a framework for their future relationship. The transition period is currently scheduled to end on December 31, 2020 and the relationship between the U.K. and the E.U. beyond that date is uncertain. At the end of the transition period, firms based in the U.K. are expected to lose their existing access arrangements to the E.U. markets.

As necessary, certain client relationships and activities currently undertaken by the company may be transitioned to other E.U. subsidiaries of Group Inc., which may result in a decline in the company’s net revenues and profitability, and could adversely affect its businesses and liquidity.

In addition, Brexit has created an uncertain political and economic environment in the U.K., and may create such environments in current E.U. member states. Political and economic uncertainty has in the past led to, and the impact of Brexit could lead to, declines in market liquidity and activity levels, volatile market conditions, a contraction of available credit, changes in interest rates or exchange rates, weaker economic growth and reduced business confidence all of which could adversely impact the company’s business.

Market Volatility

The company’s businesses have been and may be adversely affected by declining asset values. This is particularly true for those businesses in which the company has net “long” positions, receives fees based on the value of assets managed, or receives or posts collateral. Many of the company’s businesses have net “long” positions in debt securities, loans, derivatives, mortgages, equities (including private equity) and most other asset classes. These include positions taken when the company acts as a principal to facilitate clients’ activities, including exchange-based market-making activities, or commits large amounts of capital to maintain positions in interest rate and credit products, as well as through currencies, commodities, equities and mortgage-related activities. In addition, the company invests in similar asset classes. Substantially all of the company’s investing and market-making positions are marked-to-market on a daily basis and declines in asset values directly and immediately impact earnings, unless the company has effectively “hedged” its exposures to those declines.

In certain circumstances (particularly in the case of credit products and private equities or other securities that are not freely tradable or lack established and liquid trading markets), it may not be possible or economic to hedge its exposures and to the extent that this is done the hedge may be ineffective or may greatly reduce the company’s ability to profit from increases in the values of the assets. Sudden declines and significant volatility in the prices of assets have in the past and may in the future substantially curtail or eliminate the trading markets for certain assets, which may make it difficult to sell, hedge or value such assets. The inability to sell or effectively hedge assets reduces the company’s ability to limit losses in such positions and the difficulty in valuing assets may negatively affect the company’s capital, liquidity or leverage ratios, increase its funding costs and generally require maintaining additional capital.

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In the company's exchange-based market-making activities, the company is obligated by stock exchange rules to maintain an orderly market, including by purchasing securities in a declining market. In markets where asset values are declining and in volatile markets, this results in losses and an increased need for liquidity.

Collateral is posted to support obligations of the company and received to support the obligations of clients and counterparties in connection with client execution businesses. When the value of the assets posted as collateral or the credit ratings of the party posting collateral decline, the party posting the collateral may need to provide additional collateral or, if possible, reduce its trading position. An example of such a situation is a "margin call" in connection with a brokerage account. Therefore, declines in the value of asset classes used as collateral mean that either the cost of funding positions is increased or the size of positions is decreased.

If the company is the party providing collateral, this can increase costs and reduce profitability and if the company is the party receiving collateral, this can also reduce profitability by reducing the level of business done with clients and counterparties. In addition, volatile or less liquid markets increase the difficulty of valuing assets which can lead to costly and time-consuming disputes over asset values and the level of required collateral, as well as increased credit risk to the recipient of the collateral due to delays in receiving adequate collateral. In cases where the company forecloses on collateral, sudden declines in the value or liquidity of the collateral may, despite credit monitoring, over-collateralisation, the ability to call for additional collateral or the ability to force repayment of the underlying obligation, result in significant losses to the company, especially where there is a single type of collateral supporting the obligation. In addition, the company may be subject to claims that the foreclosure was not permitted under the legal documents, was conducted in an improper manner or caused a client or counterparty to go out of business.

Liquidity

Liquidity is essential to the company's businesses. It is of critical importance to the company, as most of the failures of financial institutions have occurred in large part due to insufficient liquidity. The company's liquidity may be impaired by an inability to access secured and/or unsecured debt markets, an inability to access funds from Group Inc. or other affiliates, an inability to sell assets or redeem investments or unforeseen outflows of cash or collateral. This situation may arise due to circumstances that the company may be unable to control, such as a general market disruption or an operational problem that affects third parties or the company or its affiliates or even by the perception amongst market participants that the company, or other market participants, are experiencing greater liquidity risk.

The company employs structured products to benefit its clients and hedge its own risks. The financial instruments that the company holds and the contracts to which it is a party are often complex, and these complex structured products often do not have readily available markets to access in times of liquidity stress. The company's investing and financing activities may lead to situations where the holdings from these activities represent a significant portion of specific markets, which could restrict liquidity for the company's positions.

Further, the company's ability to sell assets may be impaired if there is not generally a liquid market for such assets, as well as in circumstances where other market participants are seeking to sell similar assets at the same time, as is likely to occur in a liquidity or other market crisis or in response to changes to rules or regulations. In addition, financial institutions with which the company interacts may exercise set-off rights or the right to require additional collateral, including in difficult market conditions, which could further impair the company's liquidity.

The company is an indirect, wholly-owned operating subsidiary of Group Inc. and depends on Group Inc. for capital and funding. The credit ratings of the company and those of Group Inc. are important to the company's liquidity. A reduction in the company's and/or Group Inc.'s credit ratings could adversely affect the company's liquidity and competitive position, increase borrowing costs, limit access to the capital markets or funding from Group Inc. or trigger obligations under certain provisions in some trading and collateralised financing contracts. Under these provisions, counterparties could be permitted to terminate contracts with the company or Group Inc. or require additional collateral. Termination of trading and collateralised financing contracts could cause losses and impair liquidity by requiring Group Inc. or the company to find other sources of financing or to make significant cash payments or securities movements.

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The company's cost of obtaining long-term unsecured funding is directly related to both the credit spreads of the company and Group Inc. Increases in the credit spreads of the company and/or Group Inc. can significantly increase the cost of this funding. Changes in credit spreads are continuous, market-driven, and subject at times to unpredictable and highly volatile movements. The credit spreads of the company and/or Group Inc. are also influenced by market perceptions of the company's and/or Group Inc.'s creditworthiness and movements in the costs to purchasers of credit default swaps referenced to Group Inc.'s long-term debt. The market for credit default swaps has proven to be extremely volatile and at times has lacked a high degree of transparency or liquidity.

Regulatory changes relating to liquidity may also negatively impact the company's results of operations and competitive position. Numerous regulations have been adopted or proposed to introduce more stringent liquidity requirements for large financial institutions. These regulations address, among other matters, liquidity stress testing, minimum liquidity requirements, wholesale funding, restrictions on short-term debt and structured notes issued by top-tier holding companies and prohibitions on parent guarantees that are subject to certain cross-defaults. New and prospective liquidity-related regulations may overlap with, and be impacted by, other regulatory changes, including rules relating to minimum long-term debt requirements and TLAC, capital, leverage and resolution and recovery frameworks applicable to large financial institutions. Given the overlapping and complex interactions among these new and prospective regulations, they may have unintended cumulative effects, and their full impact will remain uncertain, while regulatory reforms are being adopted and market practices develop.

Resolution and Recovery Planning

The circumstances in which a resolution authority would exercise its "bail-in" powers to recapitalize a failing entity by writing down its unsecured debt or converting it into equity are uncertain. If these powers were to be exercised (or if there was a suggestion that they could be exercised) in respect of the company, such exercise would likely have a material adverse effect on the value of debt investments in the company, including a potential loss of some or all of such investments.

Credit Markets

Widening credit spreads for the company or Group Inc., as well as significant declines in the availability of credit, have in the past adversely affected the company's ability to borrow on a secured and unsecured basis and may do so in the future. The company obtains the majority of its unsecured funding indirectly from Group Inc., which funds itself on an unsecured basis by issuing long-term debt, by accepting deposits at its bank subsidiaries, by issuing hybrid financial instruments, or by obtaining bank loans or lines of credit. The company seeks to finance many of its assets on a secured basis. Any disruptions in the credit markets may make it harder and more expensive to obtain funding for businesses. If the company's available funding is limited or the company is forced to fund operations at a higher cost, these conditions may require curtailment of business activities and increase the cost of funding, both of which could reduce profitability, particularly in businesses that involve investing and market making.

Clients engaging in mergers, acquisitions and other types of strategic transactions often rely on access to the secured and unsecured credit markets to finance their transactions. A lack of available credit or an increased cost of credit can adversely affect the size, volume and timing of clients' merger and acquisition transactions, particularly large transactions, and adversely affect the company's financial advisory and underwriting businesses.

The company's credit businesses have been and may in the future be negatively affected by a lack of liquidity in credit markets. A lack of liquidity reduces price transparency, increases price volatility and decreases transaction volumes and size, all of which can increase transaction risk or decrease the profitability of these businesses.

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Concentration of Risk

Concentration of risk increases the potential for significant losses in market-making, underwriting, investing and financing activities. The number and size of these transactions has affected and may in the future affect the company's results of operations in a given period. Moreover, because of concentration of risk, the company may suffer losses even when economic and market conditions are generally favourable for competitors. Disruptions in the credit markets can make it difficult to hedge these credit exposures effectively or economically.

In the ordinary course of business, the company may be subject to a concentration of credit risk to a particular counterparty, borrower, issuer, including sovereign issuers, or geographic area or group of related countries, such as the E.U. A failure or downgrade of, or default by, such entities could negatively impact the company's businesses, perhaps materially, and the systems by which the company sets limits and monitors the level of its credit exposure to individual entities, industries, countries and regions may not function as anticipated. Regulatory reforms, including the European Market Infrastructure Regulation and the Dodd-Frank Wall Street Reform and Consumer Protection Act have led to increased centralisation of trading activity through particular clearing houses, central agents or exchanges, which has significantly increased the company's concentration of risk with respect to these entities. While the company's activities expose it to many different industries, counterparties and countries, the company routinely executes a high volume of transactions with counterparties engaged in financial services activities, including brokers and dealers, commercial banks, clearing houses and exchanges. This has resulted in significant credit concentration with respect to these counterparties.

Credit Quality

The company is exposed to the risk that third parties who owe money, securities or other assets will not perform their obligations. These parties may default on their obligations to the company due to bankruptcy, lack of liquidity, operational failure or other reasons. A failure of a significant market participant, or even concerns about a default by such an institution, could lead to significant liquidity problems, losses or defaults by other institutions, which in turn could adversely affect the company.

The company is also subject to the risk that its rights against third parties may not be enforceable in all circumstances. In addition, deterioration in the credit quality of third parties whose securities or obligations are held by the company, including a deterioration in the value of collateral posted by third parties to secure their obligations to the company under derivatives contracts and loan agreements, could result in losses and/or adversely affect the company's ability to rehypothecate or otherwise use those securities or obligations for liquidity purposes.

A significant downgrade in the credit ratings of the company's counterparties could also have a negative impact on the company's results. While in many cases the company is permitted to require additional collateral from counterparties that experience financial difficulty, disputes may arise as to the amount of collateral the company is entitled to receive and the value of pledged assets. The termination of contracts and the foreclosure on collateral may subject the company to claims for the improper exercise of its rights. Default rates, downgrades and disputes with counterparties as to the valuation of collateral typically increase significantly in times of market stress, increased volatility and illiquidity.

Composition of Client Base

The company's client base is not the same as that of its major competitors. The company's businesses may have a higher or lower percentage of clients in certain industries or markets than some or all of its competitors. Therefore, unfavourable industry developments or market conditions affecting certain industries or markets have resulted in the past and may result in the future in the company's businesses underperforming relative to similar businesses of a competitor if its businesses have a higher concentration of clients in such industries or markets.

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Correspondingly, favourable or simply less adverse developments or market conditions involving industries or markets in a business where the company has a lower concentration of clients in such industry or market have also resulted in the past and may result in the future in the company underperforming relative to a similar business of a competitor that has a higher concentration of clients in such industry or market. For example, the company has a smaller corporate client base in its market-making businesses than many of its peers and therefore the company's competitors may benefit more from increased activity by corporate clients.

Derivative Transactions

The company is party to a large number of derivative transactions, including credit derivatives. Many of these derivative instruments are individually negotiated and non-standardised, which can make exiting, transferring or settling positions difficult. Many credit derivatives require that the company deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, the company does not hold the underlying security, loan or other obligation and may not be able to obtain the underlying security, loan or other obligation. This could cause the company to forfeit the payments due under these contracts or result in settlement delays with the attendant credit and operational risk as well as increased costs to the company.

As a signatory to the International Swaps and Derivatives Association Universal Resolution Stay Protocol (ISDA Universal Protocol) and the International Swaps and Derivatives Association 2018 U.S. Resolution Stay Protocol (collectively, ISDA Protocols), the company may not be able to exercise termination rights and other remedies against counterparties and, as this new regime has not yet been tested, the company may suffer risks or losses that it would not have expected to suffer if it could immediately close out transactions upon a termination event. Various non-U.S. regulators have also proposed regulations contemplated by the ISDA Universal Protocol, which might result in additional limitations on the company's ability to exercise remedies against counterparties. The ISDA Protocols and these rules and regulations extend to repurchase agreements and other instruments that are not derivative contracts, and their impact will depend on the development of market practices and structures.

Derivative contracts and other transactions entered into with third parties are not always confirmed by the counterparties or settled on a timely basis. While the transaction remains unconfirmed or during any delay in settlement, the company is subject to heightened credit and operational risk and in the event of a default may find it more difficult to enforce its rights.

In addition, as new complex derivative products are created, covering a wider array of underlying credit and other instruments, disputes about the terms of the underlying contracts could arise, which could impair the company's ability to effectively manage its risk exposures from these products and subject it to increased costs. The provisions of legislation requiring central clearing of credit derivatives and other OTC derivatives, or a market shift toward standardised derivatives, could reduce the risk associated with these transactions, but under certain circumstances could also limit the company's ability to develop derivatives that best suit the needs of clients and to hedge its own risks, and could adversely affect the company's profitability and increase credit exposure to central clearing platforms.

Operational Infrastructure

The company's businesses are highly dependent on its ability to process and monitor, on a daily basis, a very large number of transactions, many of which are highly complex, and occur at high volumes and frequencies, across numerous and diverse markets in many currencies. These transactions, as well as information technology services provided to clients, often must adhere to client-specific guidelines, as well as legal and regulatory standards.

Many rules and regulations worldwide govern the company's obligations to execute transactions and report such transactions and other information to regulators, exchanges and investors. Compliance with these legal and reporting requirements can be challenging, and the company has been, and may in the future be, subject to regulatory fines and penalties for failing to follow these rules or to report timely, accurate and complete information in accordance with these rules. As such requirements expand, compliance with these rules and regulations has become more challenging.

The use of computing devices and phones is critical to the work done by the company's employees and the operation of the company's systems and businesses and those of its clients and third-party service providers and vendors. Computers and computer networks are subject to various risks, including, among others, cyber attacks, inherent technological defects, system failures and errors by human operators. For example, fundamental security flaws in computer chips found in many types of these computing devices and phones have been reported in the past and may be discovered in the future. Cloud technologies are also critical to the operation of the company's systems and platforms and the company's reliance on cloud technologies is growing. Service disruptions may lead to delays in accessing, or the loss of, data that is important to the company's businesses and may hinder the company's clients' access to the company's platforms. Addressing these and similar issues could be costly and affect the performance of these businesses and systems. Operational risks may be incurred in applying fixes and there may still be residual security risks.

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Additionally, although the prevalence and scope of applications of distributed ledger technology and similar technologies is growing, the technology is also nascent and may be vulnerable to cyber attacks or have other inherent weaknesses. The company may be, or may become, exposed to risks related to distributed ledger technology through the company's facilitation of clients' activities involving financial products linked to distributed ledger technology, such as blockchain or cryptocurrencies, the company's investments in firms that seek to develop platforms based on distributed ledger technology, and the use of distributed ledger technology by third-party vendors, clients, counterparties, clearing houses and other financial intermediaries.

In addition, the company faces the risk of operational failure or significant operational delay, termination or capacity constraints of any of the clearing agents, exchanges, clearing houses or other financial intermediaries that it uses to facilitate securities and derivatives transactions, and as interconnectivity with clients grows, the company will increasingly face the risk of operational failure or significant operational delay with respect to clients' systems.

Despite the company's resiliency plans and facilities, its ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports its businesses and the communities where the company is located. This may include a disruption involving electrical, satellite, undersea cable or other communications, internet, transportation or other facilities used by the company, its employees or third parties with which the company conducts business, including cloud service providers. These disruptions may occur as a result of events that affect only the company's buildings or systems or those of such third parties, or as a result of events with a broader impact globally, regionally or in the cities where those buildings or systems are located, including, but not limited to, natural disasters, war, civil unrest, terrorism, economic or political developments, pandemics and weather events.

In addition, although the company seeks to diversify its third-party vendors to increase its resiliency, the company is also exposed to the risk that a disruption or other information technology event at a common service provider to the company's vendors could impede their ability to provide products or services to the company. The company may not be able to effectively monitor or mitigate operational risks relating to its vendors' use of common service providers.

Cyber Security

The company is regularly the target of attempted cyber attacks, including denial-of-service attacks, and must continuously monitor and develop its systems to protect the integrity and functionality of its technology infrastructure and access to and the security of its data. The increasing migration of the company's communication from devices the company provides to employee-owned devices presents additional risks of cyber attacks. In addition, due to the interconnectivity with third-party vendors (and their respective service providers), central agents, exchanges, clearing houses and other financial institutions, the company could be adversely impacted if any of them is subject to a successful cyber attack or other information security event. These impacts could include the loss of access to information or services from the third party subject to the cyber attack or other information security event, which could, in turn, interrupt certain of the company's businesses.

Despite the company's efforts to ensure the integrity of its systems and information, it may not be able to anticipate, detect or implement effective preventive measures against all cyber threats, especially because the techniques used are increasingly sophisticated, change frequently and are often not recognised until launched. Cyber attacks can originate from a variety of sources, including third parties who are affiliated with or sponsored by foreign governments or are involved with organised crime or terrorist organisations. Third parties may also attempt to place individuals in the company's office or induce employees, clients or other users of the company's systems to disclose sensitive information or provide access to the company's data or that of its clients, and these types of risks may be difficult to detect or prevent.

Although the company takes protective measures proactively and endeavours to modify them as circumstances warrant, its computer systems, software and networks may be vulnerable to unauthorised access, misuse, computer viruses or other malicious code, cyber attacks on the company's vendors and other events that could have a security impact. Due to the complexity and interconnectedness of the company's systems, the process of enhancing protective measures can itself create a risk of systems disruptions and security issues. In addition, protective measures that the company employs to compartmentalise its data may reduce its visibility into, and adversely affect its ability to respond to, cyber threats and issues within its systems.

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If one or more of such events occur, this potentially could jeopardise the company or its clients' or counterparties' confidential and other information processed, stored in or transmitted through the company's computer systems and networks, or otherwise cause interruptions or malfunctions in the company's operations or those of its clients', its counterparties' or third parties', which could impact their ability to transact with the company or otherwise result in legal or regulatory action, significant losses or reputational damage. In addition, such an event could persist for an extended period of time before being detected, and, following detection, it could take considerable time for the company to obtain full and reliable information about the extent, amount and type of information compromised. During the course of an investigation, the company may not know the full impact of the event and how to remediate it, and actions, decisions and mistakes that are taken or made may further increase the negative effects of the event on the company's business, results of operations and reputation.

The company has expended, and expects to continue to expend, significant resources on an ongoing basis to modify its protective measures and to investigate and remediate vulnerabilities or other exposures, but these measures may be ineffective and the company may be subject to legal or regulatory action, as well as financial losses that are either not insured against or not fully covered through any insurance it maintains.

The company's confidential information may also be at risk from the compromise of clients' personal electronic devices or as a result of a data security breach at an unrelated company. Losses due to unauthorised account activity could harm the company's reputation and may have adverse effects on its business, financial condition and results of operations.

The increased use of mobile and cloud technologies can heighten these and other operational risks. Certain aspects of the security of such technologies are unpredictable or beyond the company's control, and the failure by mobile technology and cloud service providers to adequately safeguard their systems and prevent cyber attacks could disrupt the company's operations and result in misappropriation, corruption or loss of confidential and other information. In addition, there is a risk that encryption and other protective measures, despite their sophistication, may be defeated, particularly to the extent that new computing technologies vastly increase the speed and computing power available.

The company routinely transmits and receives personal, confidential and proprietary information by email and other electronic means. The company has discussed and worked with clients, vendors, service providers, counterparties and other third parties to develop secure transmission capabilities and protect against cyber attacks, but does not have, and may be unable to put in place, secure capabilities with all of its clients, vendors, service providers, counterparties and other third parties and it may not be able to ensure that these third parties have appropriate controls in place to protect the confidentiality of the information. An interception, misuse or mishandling of personal, confidential or proprietary information being sent to or received from a client, vendor, service provider, counterparty or other third party could result in legal liability, regulatory action and reputational harm.

Risk Management

The company seeks to monitor and control its risk exposure through a risk and control framework encompassing a variety of separate, but complementary financial, credit, operational, compliance and legal reporting systems, internal controls, management review processes and other mechanisms. The company's risk management process seeks to balance its ability to profit from market-making positions and underwriting activities with its exposure to potential losses. Whilst the company employs a broad and diversified set of risk monitoring and risk mitigation techniques, those techniques and the judgements that accompany their application cannot anticipate every economic and financial outcome or the specifics and timing of such outcomes. Thus, in the course of its activities, the company has incurred and may in the future incur losses. Market conditions in recent years have involved unprecedented dislocations and highlight the limitations inherent in using historical data to manage risk.

The models that the company uses to assess and control its risk exposures reflect assumptions about the degrees of correlation or lack thereof among prices of various asset classes or other market indicators. In times of market stress or other unforeseen circumstances, previously uncorrelated indicators may become correlated, or conversely previously correlated indicators may move in different directions. These types of market movements have at times limited the effectiveness of the company's hedging strategies and have caused it to incur significant losses, and they may do so in the future. These changes in correlation have been and may in the future be exacerbated where other market participants are using risk or trading models with assumptions or algorithms that are similar to the company's. In these and other cases, it may be difficult to reduce the company's risk positions due to the activity of other market participants or widespread market dislocations, including circumstances where asset values are declining significantly or no market exists for certain assets.

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In addition, the use of models in connection with risk management and numerous other critical activities presents risks that such models may be ineffective, either because of poor design, ineffective testing or improper or flawed inputs, as well as unpermitted access to such models resulting in unapproved or malicious changes to the model or its inputs.

To the extent that the company has positions through its market-making or origination activities or it makes investments directly through its investing activities, including private equity, that do not have an established liquid trading market or are otherwise subject to restrictions on sale or hedging, the company may not be able to reduce its positions and therefore reduce its risk associated with those positions. In addition, to the extent permitted by applicable law and regulation, the company invests its own capital in private equity, credit, real estate and hedge funds that it manages and limitations on its ability to withdraw some or all of its investments in these funds, whether for legal, reputational or other reasons, may make it more difficult for the company to control the risk exposures relating to these investments.

Prudent risk management, as well as regulatory restrictions, may cause the company to limit its exposure to counterparties, geographic areas or markets, which may limit its business opportunities and increase the cost of funding or hedging activities.

New Business Initiatives

The company faces enhanced risks as new business initiatives lead it to transact with a broader array of clients and counterparties and expose it to new asset classes and new markets. A number of the company's recent and planned business initiatives and expansions of existing businesses may bring it into contact, directly or indirectly, with individuals and entities that are not within the company's traditional client and counterparty base and expose it to new asset classes and new markets. For example, the company continues to transact business and invest in new regions, including a wide range of emerging and growth markets.

New business initiatives expose the company to new and enhanced risks, including risks associated with dealing with governmental entities, reputational concerns arising from dealing with different types of clients, counterparties and investors, greater regulatory scrutiny of these activities, increased credit-related, market, sovereign and operational risks, risks arising from accidents or acts of terrorism, and reputational concerns with the manner in which certain assets are being operated or held or in which the company interacts with these counterparties. Legal, regulatory and reputational risks may also exist in connection with activities and transactions involving new products or markets where there is regulatory uncertainty or where there are different or conflicting regulations depending on the regulator or the jurisdiction involved, particularly where transactions in such products may involve multiple jurisdictions.

Operating in Multiple Jurisdictions

In conducting the company's businesses and maintaining and supporting its global operations, the company is subject to risks of possible nationalisation, expropriation, price controls, capital controls, exchange controls and other restrictive governmental actions, as well as the outbreak of hostilities or acts of terrorism. For example, sanctions have been imposed by the U.S. and E.U. on certain individuals and companies in Russia and Venezuela. In many countries, the laws and regulations applicable to the securities and financial services industries and many of the transactions in which the company is involved are uncertain and evolving, and it may be difficult to determine the exact requirements of local laws in every market. Any determination by local regulators that the company has not acted in compliance with the application of local laws in a particular market or a failure to develop effective working relationships with local regulators could have a significant and negative effect not only on the company's businesses in that market but also on its reputation generally. Further, in some jurisdictions a failure, or alleged failure, to comply with laws and regulations have subjected and may in the future subject the company and its personnel not only to civil actions but also criminal actions. The company is also subject to the enhanced risk that transactions it structures might not be legally enforceable in all cases.

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While business and other practices throughout the world differ, the company is subject in its operations worldwide to rules and regulations relating to corrupt and illegal payments, hiring practices and money laundering, as well as laws relating to doing business with certain individuals, groups and countries, such as the U.S. Foreign Corrupt Practices Act, the USA PATRIOT Act of 2001 and the U.K. Bribery Act. While the company has invested and continues to invest significant resources in training and in compliance monitoring, the geographical diversity of its operations, employees, and clients, as well as the vendors and other third parties that the company deals with, greatly increases the risk that the company may be found in violation of such rules or regulations and any such violation could subject it to significant penalties or adversely affect its reputation.

In addition, there have been a number of highly publicised cases around the world, involving actual or alleged fraud or other misconduct by employees in the financial services industry in recent years, and the company has had, and may in the future have, employee misconduct. This misconduct has included and may also in the future include intentional efforts to ignore or circumvent applicable policies, rules or procedures or misappropriation of funds and the theft of proprietary information, including proprietary software. It is not always possible to deter or prevent employee misconduct and the precautions taken to prevent and detect this activity have not been and may not be effective in all cases. See for example, “1Malaysia Development Berhad (1MDB)-Related Matters” in Note 26 to the financial statements.

Conflicts of Interest

A failure to appropriately identify and address potential conflicts of interest could adversely affect the company’s businesses. Due to the broad scope of GS Group’s businesses and client base, the company regularly addresses potential conflicts of interest, including situations where services to a particular client or GS Group’s own investments or other interests conflict, or are perceived to conflict, with the interests of that client or another client, as well as situations where one or more of its businesses have access to material non-public information that may not be shared with other businesses within GS Group and situations where it may be a creditor of an entity with which GS Group also has an advisory or other relationship.

Extensive procedures and controls are in place that are designed to identify and address conflicts of interest, including those designed to prevent the improper sharing of information among businesses. However, appropriately identifying and dealing with conflicts of interest is complex and difficult, and the company’s reputation, which is one of its most important assets, could be damaged and the willingness of clients to enter into transactions with the company may be affected if it fails, or appears to fail, to identify, disclose and deal appropriately with conflicts of interest. In addition, potential or perceived conflicts could give rise to litigation or regulatory enforcement actions. Additionally, GS Group’s *One Goldman Sachs* initiative aims to increase collaboration amongst its businesses, which may increase the potential for actual or perceived conflicts of interest and improper information sharing.

Competition

To the extent the company expands into new business areas and new geographic regions, it will face competitors with more experience and more established relationships with clients, regulators and industry participants in the relevant market, which could adversely affect its ability to expand.

Governments and regulators have recently adopted regulations, imposed taxes, adopted compensation restrictions or otherwise put forward various proposals that have impacted or may impact the company’s ability to conduct certain of its businesses in a cost-effective manner or at all in certain or all jurisdictions, including proposals relating to restrictions on the type of activities in which financial institutions are permitted to engage. These or other similar rules, many of which do not apply to all the company’s competitors, could impact its ability to compete effectively.

Pricing and other competitive pressures in the company’s businesses have continued to increase, particularly in situations where some competitors may seek to increase market share by reducing prices. For example, in connection with investment banking and other engagements, in response to competitive pressure the company has experienced, the company has extended and priced credit at levels that may not always fully compensate it for the risks taken.

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The financial services industry is highly interrelated in that a significant volume of transactions occur among a limited number of members of that industry. Many transactions are syndicated to other financial institutions and financial institutions are often counterparties in transactions. This has led to claims by other market participants and regulators that such institutions have colluded in order to manipulate markets or market prices, including allegations that antitrust laws have been violated. While the company has extensive procedures and controls that are designed to identify and prevent such activities, allegations of such activities, particularly by regulators, can have a negative reputational impact and can subject the company to large fines and settlements, and potentially significant penalties, including treble damages.

Changes in Underliers

Certain of the company's businesses and its funding may be adversely affected by changes in the reference rates, currencies, indices, baskets, ETFs or other financial metrics (the underlier) to which the products offered by the company or funding raised by the company are linked, in particular by changes in or the discontinuance of IBORs.

Many of the products that the company owns or that it offers, such as structured notes, warrants, swaps or security-based swaps, pay interest or determine the principal amount to be paid at maturity or in the event of default by reference to rates or by reference to another underlier. In the event that the composition of the underlier is significantly changed, by reference to rules governing such underlier or otherwise, the underlier ceases to exist (for example, in the event that LIBOR is discontinued, a country withdraws from the Euro or links its currency to or delinks its currency from another currency or benchmark, or an index or ETF sponsor materially alters the composition of an index or ETF) or the underlier ceases to be recognised as an acceptable market benchmark, the company may experience pricing volatility, loss of market share in certain products, adverse tax or accounting impacts, compliance, legal and operational costs and risks associated with client disclosures, as well as systems disruption, model disruption and other business continuity issues. In addition, uncertainty relating to IBORs could result in increased capital requirements for the company given potential low transaction volumes, a lack of liquidity or limited observability for exposures linked to IBORs or any emerging successor rates and operational incidents associated with changes in and the discontinuance of IBORs.

There is uncertainty as to how the financial services industry will address the discontinuance of designated rates in contracts and financial instruments or such designated rates ceasing to be acceptable reference rates. This uncertainty could ultimately result in client disputes and litigation surrounding the proper interpretation of the company's IBOR-based contracts and financial instruments.

Further, the discontinuation of an IBOR, changes in an IBOR or changes in market acceptance of any IBOR as a reference rate may also adversely affect the yield on loans or securities held by the company, amounts paid on securities the company has issued, amounts received and paid on derivative instruments the company has entered into, the value of such loans, securities or derivative instruments, the trading market for securities, the terms of new loans being made using different or modified reference rates, the company's ability to effectively use derivative instruments to manage risk, or the availability or cost of the company's floating-rate funding and its exposure to fluctuations in interest rates.

Personnel

The company's businesses may be adversely affected if it is unable to hire and retain qualified employees. The company's performance is largely dependent on the talents and efforts of highly skilled people; therefore, the company's continued ability to compete effectively in its businesses, to manage its businesses effectively and to expand into new businesses and geographic areas depends on its ability to attract new talented and diverse employees and to retain and motivate existing employees. Factors that affect the company's ability to attract and retain such employees include the level and composition of compensation and benefits, and a reputation as a successful business with a culture of fairly hiring, training and promoting qualified employees. As a significant portion of the compensation that the company pays to its employees is paid in the form of year-end discretionary compensation, a significant portion of which is in the form of deferred equity-related awards, declines in the GS Group's profitability, or in the outlook for its future profitability, as well as regulatory limitations on compensation levels and terms, can negatively impact the company's ability to hire and retain highly qualified employees.

Competition from within the financial services industry and from businesses outside the financial services industry, including the technology industry, for qualified employees has often been intense. The company has experienced increased competition in hiring and retaining employees to address the demands of new regulatory requirements and the company's technology initiatives. This is also the case in emerging and growth markets, where the company is often competing for qualified employees with entities that have a significantly greater presence or more extensive experience in the region.

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Changes in law or regulation in jurisdictions in which the company's operations are located that affect taxes on the company's employees' income, or the amount or composition of compensation, may also adversely affect the company's ability to hire and retain qualified employees in those jurisdictions.

The company's compensation practices are subject to review by, and the standards of, the PRA and the FCA. As a large financial institution, the company is subject to limitations on compensation practices (which may or may not affect competitors) by the PRA and the FCA and other regulators worldwide. These limitations, including any imposed by or as a result of future legislation or regulation, may require the company to alter compensation practices in ways that could adversely affect its ability to attract and retain talented employees.

Negative Publicity

The financial services industry generally and the company's businesses in particular have been subject to negative publicity. The company's reputation and businesses may be adversely affected by negative publicity or information regarding its business and personnel, whether or not accurate or true, that may be posted on social media or other internet forums or published by news organisations. The speed and pervasiveness with which information can be disseminated through these channels, in particular social media, may magnify risks relating to negative publicity.

Legal Liability

Substantial civil or criminal liability or significant regulatory action against the company could have material adverse financial effects or cause significant reputational harm, which in turn could seriously harm business prospects. The company faces significant legal risks in its businesses, and the volume of claims and amount of damages and penalties claimed in litigation and regulatory proceedings against financial institutions remain high. The company is, from time to time, subject to a number of other investigations and reviews by, and in some cases has received requests for documents and information from, various governmental and regulatory bodies and self-regulatory organisations relating to various aspects of the company's businesses and operations. From experience, legal claims by clients increase in a market downturn and employment-related claims increase following periods of headcount reduction. Additionally, governmental entities have been and are plaintiffs in certain of the legal proceedings in which the company is involved, and it may face future civil or criminal actions or claims by the same or other governmental entities, as well as follow-on civil litigation that is often commenced after regulatory settlements.

Significant settlements by several large financial institutions with governmental entities have been publicly announced. The trend of large settlements with governmental entities may adversely affect the outcomes for other financial institutions in similar actions, especially where governmental officials have announced that the large settlements will be used as the basis or a template for other settlements. The uncertain regulatory enforcement environment makes it difficult to estimate probable losses, which can lead to substantial disparities between legal reserves and subsequent actual settlements or penalties.

The company is subject to laws and regulations worldwide, including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, relating to corrupt and illegal payments to, and hiring practices with regard to, government officials and others. Violations of these or similar laws and regulations could result in significant monetary penalties, severe restrictions on the company's activities and damage to its reputation.

Resolution of a criminal matter involving the company or its employees could lead to increased exposure to civil litigation, could adversely affect the company's reputation, could result in penalties or limitations on the company's ability to conduct its activities generally or in certain circumstances and could have other negative effects.

Unforeseen or Catastrophic Events

The occurrence of unforeseen or catastrophic events, including the emergence of a pandemic, such as coronavirus, or other widespread health emergency (or concerns over the possibility of such an emergency), terrorist attacks, extreme terrestrial or solar weather events or other natural disasters, could create economic and financial disruptions, and could lead to operational difficulties (including travel limitations) that could impair the company's ability to manage its businesses and result in losses.

Climate Change

Climate change concerns could disrupt the company's business, affect client activity levels and creditworthiness and damage the company's reputation. Climate change may cause extreme weather events that disrupt operations at one or more of the company's primary locations, which may negatively affect its ability to service and interact with its clients. Climate change may also have a negative impact on the financial condition of its clients, which may decrease revenues from those clients and increase the credit risk associated with loans and other credit exposures to those clients. Additionally, the company's reputation may be damaged as a result of its involvement, or its clients' involvement, in certain industries or projects associated with climate change.

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Risk Management

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

Overview and Structure of Risk Management

Overview

The company believes that effective risk management is critical to its success. Accordingly, the company has established an enterprise risk management framework that employs a comprehensive, integrated approach to risk management, and is designed to enable comprehensive risk management processes through which the risks associated with the company's business are identified, assessed, monitored and managed.

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

Together with the company's board of directors, an extensive cross-divisional committee structure with representation from senior management of the company is the key to the risk management culture throughout the company. The company's risk management structure, consistent with GS Group, is built around three core components: governance; processes; and people.

Governance. Risk management governance starts with the company's board of directors, which both directly and through its committees, including the GSI Board Risk Committee and GSI Risk Committee, oversees the company's risk management policies and practices implemented through the enterprise risk management framework.

The company's revenue-producing units, as well as Treasury, Engineering, Human Capital Management, Operations, and Services, are considered the first line of defence. They are accountable for the outcomes of the company's risk-generating activities, as well as for assessing and managing those risks within the company's risk appetite.

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

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

The three lines of defence structure promotes the accountability of first line risk takers, provides a framework for effective challenge by the second line and empowers independent review from the third line.

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Processes. The company maintains various processes that are critical components of its risk management framework, including (i) risk identification and assessment, (ii) risk appetite, limit and threshold setting, (iii) risk reporting and monitoring, and (iv) risk decision-making.

The company has a comprehensive data collection process, including company-wide policies and procedures that require all employees to report and escalate for risk events. The company's approach for risk identification and assessment is comprehensive across all risk types, is dynamic and forward-looking to reflect and adapt to the company's changing risk profile and business environment, leverages subject matter expertise, and allows for prioritisation of the company's most critical risks. The company also recognises that climate change is an emerging risk that presents both challenges and opportunities for its business. Risk management functions continue to develop the company's approach to identify and manage the risks to its assets and counterparties arising from climate change.

To effectively assess and monitor the company's risks, the company maintains a daily discipline of marking substantially all of its inventory to current market levels.

An important part of the company's risk management process is stress testing. It allows the company to quantify its exposure to tail risks, highlight potential loss concentrations, undertake risk/reward analysis, and assess and mitigate its risk positions. Stress tests are performed on a regular basis and are designed to ensure a comprehensive analysis of the company's vulnerabilities, and idiosyncratic risks combining financial and non-financial risks, including, but not limited to, credit, market, liquidity and funding, operational and compliance, strategic, systemic and emerging risks into a single combined scenario. Ad hoc stress tests are also performed in anticipation of market events or conditions. Stress testing is also used to assess capital adequacy as part of capital planning and stress testing process. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" for further information.

The company's risk reporting and monitoring processes are designed to take into account information about both existing and emerging risks, thereby enabling the company's risk committees and senior management to perform their responsibilities with the appropriate level of insight into risk exposures. Furthermore, the company's limit and threshold breach processes provide means for timely escalation. The company evaluates changes in its risk profile and businesses, including changes in business mix and jurisdictions in which it operates, by monitoring risk factors at a company-wide level.

People. The experience of the company's professionals, and their understanding of the nuances and limitations of each risk measure, guide the company in assessing exposures and maintaining them within prudent levels.

Structure

Oversight of risk in the company is ultimately the responsibility of the company's board of directors, who oversee risk both directly and through delegation to various committees. A series of committees within the company with specific risk management mandates covering important aspects of the company's businesses also have oversight or decision-making responsibilities. The key committees with oversight of the company's activities are described below.

GSI Board Audit Committee. The GSI Board Audit Committee assists the company's board of directors in the review of processes for ensuring the suitability and effectiveness of the systems and controls of the company in the region. This committee also has responsibility for overseeing the external audit arrangements and review of internal audit activities. Its membership includes non-executive directors of the company. The GSI Board Audit Committee reports to the company's board of directors.

GSI Board Risk Committee. The GSI Board Risk Committee is responsible for providing advice to the company's board of directors on the company's overall current and future risk appetite and assisting the company's board of directors in overseeing the implementation of that risk appetite and strategy by senior management. This includes reviewing and advising on the company's risk strategy and oversight of the capital, liquidity and funding position of the company. Its membership includes non-executive directors of the company. The GSI Board Risk Committee reports to the company's board of directors.

European Management Committee (EMC). The EMC oversees all of the company's activities in the region. It is chaired by the chief executive officer of the company and its membership includes senior managers from the revenue-producing divisions and independent control and support functions. The EMC reports to the company's board of directors.

GSI Risk Committee. The GSI Risk Committee is a management committee, which is responsible for the ongoing monitoring and control of all financial and non-financial risks associated with the company's activities. This includes reviewing key financial and risk metrics, including but not limited to profit and loss, capital (including the ICAAP), funding, liquidity, credit risk, market risk, operational risk, price verification and stress tests. The GSI Risk Committee approves market risk, credit risk, liquidity and regulatory capital limits. Its membership includes senior managers from the revenue-producing divisions and independent risk oversight and control functions. The GSI Risk Committee reports to the GSI Board Risk Committee and the company's board of directors.

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GSI Asset Liability Committee. The GSI Asset and Liability Committee reviews and approves the strategic direction for the company's financial resources including capital, liquidity, funding and balance sheet. This committee has oversight responsibility for asset liability management, including interest rate and currency risk, funds transfer pricing, capital allocation and incentives, and credit ratings. This committee makes recommendations as to any adjustments to asset liability management and financial resource allocation in light of current events, risks, exposures, and regulatory requirements and approves related policies. Its membership includes senior managers from the revenue-producing divisions and independent risk oversight and control functions. The GSI Asset and Liability Committee reports to GS Group's Firmwide Asset Liability Committee and the EMC.

EMEA Culture and Conduct Risk Committee. The EMEA Culture and Conduct Risk Committee has oversight responsibility for culture and conduct risk, as well as for business standards and practices. Its membership includes senior managers from the revenue-producing divisions and independent risk oversight and control functions. The EMEA Culture and Conduct Risk Committee reports to the EMC, GS Group's Firmwide Client and Business Standards Committee and the company's board of directors or its committees as appropriate.

GS Group Risk Governance

The comprehensive global risk governance framework in place at the GS Group level forms an integral part of the risk management process at the company. GS Group has established a series of committees with specific risk management mandates. Committees with oversight of matters relevant to the company include representation from company's senior management. The primary GS Group risk and oversight committees are described below.

Management Committee. The Management Committee oversees the global activities of GS Group. The committee consists of the most senior leaders of GS Group, and is chaired by GS Group's chief executive officer. The chief executive officer of the company is a member of this committee.

Firmwide Enterprise Risk Committee. The Firmwide Enterprise Risk Committee is responsible for overseeing all of GS Group's financial and non-financial risks. As a part of such oversight, the committee is responsible for the ongoing review, approval and monitoring of GS Group's enterprise risk management framework, as well as its risk limits framework. This committee is co-chaired by GS Group's chief financial officer and chief risk officer, who are appointed as chairs by GS Group's chief executive officer, and reports to GS Group's Management Committee. Its membership includes representation from the company's senior management.

Firmwide Client and Business Standards Committee.

The Firmwide Client and Business Standards Committee is responsible for overseeing relationships with clients, client service and experience, and related business standards, as well as client-related reputational matters. This committee is chaired by GS Group's president and chief operating officer, who is appointed as chair by GS Group's chief executive officer, and reports to GS Group's Management Committee. Its membership includes representation from the company's senior management.

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

Conflicts Management

GS Group's senior management oversees policies related to conflicts resolution, and, in conjunction with Conflicts Resolution, Legal and Compliance, GS Group's Firmwide Client and Business Standards Committee, and other internal committees, formulates policies, standards and principles, and assists in making judgments regarding the appropriate resolution of particular conflicts. The responsibility for identifying potential conflicts, as well as complying with GS Group's policies and procedures, is shared by all GS Group employees.

As a general matter, Conflicts Resolution reviews financing and advisory engagements in Investment Banking and certain of GS Group's investing, lending and other activities. In addition, GS Group has various transaction oversight committees that also review new underwritings, loans, investments and structured products. These groups and committees work with internal and external counsel and Compliance to evaluate and address any actual or potential conflicts. Conflicts Resolution reports to the president and chief operating officer of GS Group. GS Group regularly assesses its policies and procedures that address conflicts of interest in an effort to conduct its business in accordance with the highest ethical standards and in compliance with all applicable laws, rules and regulations. The company's framework for conflicts resolution is consistent with, and part of, the GS Group framework.

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Compliance Risk Management

GS Group's Compliance Risk Management Program, administered by Compliance, assesses its compliance, regulatory and reputational risk; monitors for compliance with new or amended laws, rules and regulations; designs and implements controls, policies, procedures and training; conducts independent testing; investigates, surveils and monitors for compliance risks and breaches; and leads GS Group's responses to regulatory examinations, audits and inquiries. GS Group monitors and reviews business practices to assess whether they meet or exceed minimum regulatory and legal standards in all markets and jurisdictions in which it conducts business. The company's framework for managing compliance risk is consistent with, and part of, the GS Group framework.

Liquidity Risk Management

Overview (Audited)

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.

Treasury, which reports to GS Group's chief financial officer, has primary responsibility for developing, managing and executing GS Group's liquidity and funding strategy within its risk appetite.

Liquidity Risk, which is independent of the revenue-producing units and Treasury, and reports to GS Group's chief risk officer, has primary responsibility for assessing, monitoring and managing GS Group's liquidity risk through oversight across GS Group's global businesses and the establishment of stress testing and limits frameworks. The company's framework for managing liquidity risk is consistent with, and part of, the GS Group framework.

Liquidity Risk Management Principles (Audited)

The company manages liquidity risk according to three principles: (i) hold sufficient excess liquidity in the form of GCLA to cover outflows during a stressed period; (ii) maintain appropriate Asset-Liability Management; and (iii) maintain a viable Contingency Funding Plan.

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

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

Asset-Liability Management. The company's liquidity risk management policies are designed to ensure the company has a sufficient amount of financing, even when funding markets experience persistent stress. The company manages maturities and diversity of funding across markets, products and counterparties, and seeks to maintain a diversified external funding profile with an appropriate tenor, taking into consideration the characteristics and liquidity profile of its assets.

The company's goal is to ensure it maintains sufficient liquidity to fund its assets and meet its contractual and contingent obligations in normal times, as well as during periods of market stress. Through the dynamic balance sheet management process, actual and projected asset balances are used to determine secured and unsecured funding requirements. In a liquidity crisis, the company would first use its GCLA in order to avoid reliance on asset sales (other than its GCLA). However, the company recognises that orderly asset sales may be prudent or necessary in a severe or persistent liquidity crisis.

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Contingency Funding Plan. GS Group maintains a contingency funding plan, which has a GSI-specific addendum, to provide a framework for analysing and responding to a liquidity crisis situation or periods of market stress. The contingency funding plan outlines a list of potential risk factors, key reports and metrics that are reviewed on an ongoing basis to assist in assessing the severity of, and managing through, a liquidity crisis and/or market dislocation. The contingency funding plan also describes the company's potential responses if assessments indicate that the company has entered a liquidity crisis, which include pre-funding for what the company estimates will be its potential cash and collateral needs, as well as utilising secondary sources of liquidity. Mitigants and action items to address specific risks which may arise are also described and assigned to individuals responsible for execution.

Stress Tests

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. One of the company's primary internal liquidity risk models, referred to as the Modeled Liquidity Outflow, quantifies the company's liquidity risks over a 30-day stress scenario. Other factors are considered including, but not limited to, an assessment of potential intraday liquidity needs through an additional internal liquidity risk model, referred to as the Intraday Liquidity Model, the results of the company's long-term stress testing models, resolution liquidity models and other applicable regulatory requirements and a qualitative assessment of the condition of the company, as well as the financial markets. The results of the Modeled Liquidity Outflow, the Intraday Liquidity Model and the long-term stress testing models are reported to senior management on a regular basis. GS Group and the company also perform stress tests. See "Overview and Structure of Risk Management" for information about company-wide stress tests.

Modeled Liquidity Outflow. The Modeled Liquidity Outflow is based on conducting multiple scenarios that include combinations of market-wide stress and GS Group-specific stress. The scenarios are characterised by the following qualitative elements:

- Severely challenged market environments, including low consumer and corporate confidence, financial and political instability, adverse changes in market values, including potential declines in equity markets and widening of credit spreads; and
- A GS Group-specific crisis potentially triggered by material losses, reputational damage, litigation and/or a ratings downgrade.

The following are key modelling elements of the company's Modeled Liquidity Outflow:

- Liquidity needs over a 30-day scenario;
- A two-notch downgrade of the long-term senior unsecured credit ratings of Group Inc. and its rated subsidiaries, including GSI;
- Changing conditions in funding markets, which limit the company's access to unsecured and secured funding; and
- A combination of contractual outflows, such as upcoming maturities of unsecured debt, and contingent outflows, including but not limited to, the withdrawal of customer credit balances in the company's prime brokerage business or an increase in variation margin requirements due to adverse changes in the value of the company's exchange-traded and OTC-cleared derivatives.

Intraday Liquidity Model. The company's Intraday Liquidity Model measures the company's intraday liquidity needs using a scenario analysis characterised by the same qualitative elements as the Modeled Liquidity Outflow. The model assesses the risk of increased intraday liquidity requirements during a scenario where access to sources of intraday liquidity may become constrained.

Long-Term Stress Testing. The company utilises longer-term stress tests to take a forward view on its liquidity position through prolonged stress periods in which the company experiences a severe liquidity stress and recovers in an environment that continues to be challenging.

Resolution Liquidity Models. In connection with GS Group's resolution planning efforts, GS Group has established a Resolution Liquidity Adequacy and Positioning framework, which estimates liquidity needs of its major subsidiaries, including GSI, in a stressed environment. GS Group has also established a Resolution Liquidity Execution Need framework, which measures the liquidity needs of its major subsidiaries, including GSI, to stabilise and wind-down following a Group Inc. bankruptcy filing in accordance with GS Group's preferred resolution strategy.

In addition, GS Group has established a triggers and alerts framework, which is designed to provide the GS Group board of directors with information needed to make an informed decision on whether and when to commence bankruptcy proceedings for Group Inc.

Limits

The company uses liquidity risk limits at various levels and across liquidity risk types to manage the size of its liquidity exposures. Limits are measured relative to acceptable levels of risk given the company's liquidity risk tolerance. The purpose of these limits is to assist senior management in monitoring and controlling the company's overall liquidity profile.

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The GSI Board Risk Committee and the GSI Risk Committee approve the company's limits. Limits are reviewed frequently and amended, with required approvals, on a permanent and temporary basis, as appropriate, to reflect changing market or business conditions.

Limits are monitored by the company's Treasury and Liquidity Risk functions. Liquidity Risk is responsible for identifying and escalating to senior management and/or the appropriate risk committee, on a timely basis, instances where limits have been exceeded.

GCLA and Unencumbered Metrics

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

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

\$ in millions	Average for the Period Ended November	
	2019	2018
Overnight cash deposits	\$13,583	\$22,037
U.S. government obligations	19,747	18,710
U.K. government obligations	11,708	9,938
French government obligations	7,784	6,760
German government obligations	6,315	6,678
Japanese government obligations	2,317	2,410
Total	\$61,454	\$66,533

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

Other Unencumbered Assets. In addition to its GCLA, the company has a significant amount of other unencumbered cash and financial instruments, including other government obligations, high-grade money market securities, corporate obligations, marginable equities, loans and cash deposits not included in its GCLA. The fair value of the company's other unencumbered assets averaged \$33.00 billion for the period ended November 2019 and \$26.11 billion for the period ended November 2018.

Liquidity Regulatory Framework

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

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

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

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

Credit Ratings

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

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

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

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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 November	
	2019	2018
Additional collateral or termination payments:		
One-notch downgrade	\$166	\$ 96
Two-notch downgrade	\$594	\$252

Cash Flows

As a global financial institution, the company's cash flows are complex and bear little relation to the company's profitability and net assets. Consequently, the company believes that traditional cash flow analysis is less meaningful in evaluating its liquidity position than the liquidity and asset-liability management policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends and strategic initiatives in the company's businesses.

The statements of cash flows are set out on page 53 of this annual report.

Period Ended November 2019. The company's cash and cash equivalents decreased by \$1.55 billion to \$22.36 billion at the end of November 2019. The company generated \$362 million in net cash from operating activities. The company used \$1.69 billion in net cash for financing activities, due to the company paying a dividend of \$1.00 billion and paying interest on its AT1 notes and long-term subordinated loans. These were partially offset by the company issuing \$340 million of share capital.

Period Ended November 2018. The company's cash and cash equivalents increased by \$5.00 billion to \$24.24 billion at the end of November 2018. The company generated \$5.73 billion in net cash from operating activities. The company used \$557 million in net cash for financing activities, due to payment of interest on AT1 notes and long-term subordinated loans. In addition, the company issued \$2.50 billion of AT1 notes and paid a dividend of \$2.50 billion during the period.

Maturity of Financial Liabilities

See Note 28 to the financial statements for a maturity analysis of the company's financial liabilities.

Market Risk Management

Overview (Audited)

Market risk is the risk of loss in the value of the company's inventory and other financial assets and liabilities accounted for at fair value due to changes in market conditions. The company employs a variety of risk measures, each described in the respective sections below, to monitor market risk. Categories of market risk include the following:

- Interest rate risk: results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, prepayment speeds and credit spreads;
- Equity price risk: results from exposures to changes in prices and volatilities of individual equities, baskets of equities and equity indices;
- Currency rate risk: results from exposures to changes in spot prices, forward prices and volatilities of currency rates; and
- Commodity price risk: results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil and metals.

Market Risk, which is independent of the revenue-producing units and reports to GS Group's chief risk officer, has primary responsibility for assessing, monitoring and managing GS Group's market risk through oversight across GS Group's global businesses.

Managers in revenue-producing units and Market Risk discuss market information, positions and estimated loss scenarios on an ongoing basis. Managers in revenue-producing units are accountable for managing risk within prescribed limits, both at the GS Group and the company level.

Market Risk Management Process (Audited)

The company's process for managing market risk includes the critical components of the risk framework described in the "Overview and Structure of Risk Management", as well as the following:

- Monitoring compliance with established market risk limits and reporting the company's exposures;
- Diversifying exposures;
- Controlling position sizes; and
- Evaluating mitigants, such as economic hedges in related securities or derivatives.

The company's framework for managing market risk is consistent with, and part of, the GS Group framework, and results are analysed by business and in aggregate, at both the GS Group and the company level.

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Risk Measures (Audited)

The company produces risk measures and monitors them against established market risk limits. These measures reflect an extensive range of scenarios and the results are aggregated at the product, business and company-wide level.

A variety of risk measures are used to estimate the size of potential losses for both moderate and more extreme market moves over both short- and long-term time horizons. Primary risk measures are VaR, which is used for shorter-term periods, and stress tests. The company's risk report details key risks, drivers and changes for each business, and is distributed daily to senior management of both the revenue-producing units and independent risk oversight and control functions.

VaR. VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. A one-day time horizon with a 95% confidence level is typically employed. The VaR model is a single model that captures risks including interest rates, equity prices, currency rates and commodity prices. As such, VaR facilitates comparison across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk across the company. The VaR model is applied consistently across GS Group, including the company.

VaR is analysed at the company level and a variety of more detailed levels, including by risk category and business. Inherent limitations to VaR include:

- VaR does not estimate potential losses over longer time horizons where moves may be extreme;
- VaR does not take account of the relative liquidity of different risk positions; and
- Previous moves in market risk factors may not produce accurate predictions of all future market moves.

To comprehensively capture the company's exposures and relevant risks in the VaR calculations, historical simulations with full valuation of market factors at the position level by simultaneously shocking the relevant market factors for that position are used. These market factors include spot prices, credit spreads, funding spreads, yield curves, volatility and correlation, and are updated periodically based on changes in the composition of positions, as well as variations in market conditions. A sample from five years of historical data is taken to generate the scenarios for the VaR calculation. The historical data is weighted so that the relative importance of the data reduces over time. This gives greater importance to more recent observations and reflects current asset volatilities, which improves the accuracy of estimates of potential loss. As a result, even if positions included in VaR were unchanged, VaR would increase with increasing market volatility and vice versa.

Given its reliance on historical data, VaR is most effective in estimating risk exposures in markets in which there are no sudden fundamental changes or shifts in market conditions.

The VaR measure does not include:

- Positions that are best measured and monitored using sensitivity measures; and
- The impact of changes in counterparty and GS Group's and/or the company's credit spreads on derivatives, as well as changes in GS Group's and/or the company's credit spreads on unsecured borrowings, which are designated at fair value through profit or loss.

Daily backtesting of the VaR model is performed (i.e., comparing daily trading net revenues to the VaR measure calculated as of the prior business day) at the GS Group and company level and for each of GS Group's businesses.

Stress Testing. Stress testing is a method of determining the effect on GS Group of various hypothetical stress scenarios. GS Group uses stress testing to examine risks of specific portfolios, as well as the potential impact of significant risk exposures across GS Group, and the impact specifically on the company. A variety of stress testing techniques to calculate the potential loss from a wide range of market moves on the company's portfolios are used, including firmwide stress tests, sensitivity analysis and scenario analysis. The results of the various stress tests are analysed together for risk management purposes. See "Overview and Structure of Risk Management" for information about company-wide stress tests.

Unlike VaR measures, which have an implied probability because they are calculated at a specified confidence level, there may not be an implied probability that GS Group's stress test scenarios will occur. Instead, stress testing is used to model both moderate and more extreme moves in underlying market factors. When estimating potential loss, it is generally assumed that positions cannot be reduced or hedged (although experience demonstrates that the company is generally able to do so).

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Limits

The company uses market risk limits at various levels to manage the size of its market exposures. These limits are set based on VaR and on a range of stress tests relevant to the company's exposures.

The GSI Board Risk Committee and the GSI Risk Committee set market risk limits for the company at an entity, business and product level, consistent with the company's risk appetite.

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

Metrics (Audited)

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	Period Ended November	
	2019	2018
Categories		
Interest rates	\$ 24	\$ 22
Equity prices	18	20
Currency rates	8	10
Commodity prices	1	1
Diversification effect	(19)	(21)
Total	\$ 32	\$ 32

The company's average daily VaR was unchanged for the period ended November 2019 compared with the period ended November 2018.

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

\$ in millions	As of November	
	2019	2018
Categories		
Interest rates	\$ 23	\$ 25
Equity prices	18	19
Currency rates	6	10
Commodity prices	1	1
Diversification effect	(17)	(24)
Total	\$ 31	\$ 31

The company's period-end VaR was unchanged for the period ended November 2019 compared with the period ended November 2018.

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

\$ in millions	Period Ended November			
	2019		2018	
	High	Low	High	Low
Categories				
Interest rates	\$34	\$18	\$37	\$18
Equity prices	\$37	\$13	\$33	\$16
Currency rates	\$16	\$ 4	\$20	\$ 6
Commodity prices	\$ 2	\$ -	\$ 5	\$ -
Company-wide				
VaR	\$49	\$25	\$41	\$25

Sensitivity Measures (Audited)

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 \$31.6 million as of November 2019 and \$33.2 million as of November 2018.

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Credit Risk Management

Overview (Audited)

Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an OTC derivatives counterparty or a borrower) or an issuer of securities or other instruments the company holds. The company's exposure to credit risk comes mostly from client transactions in OTC derivatives. Credit risk also comes from cash placed with banks, securities financing transactions (i.e., resale and repurchase agreements and securities borrowing and lending activities) and debtors. In addition, the company holds other positions that give rise to credit risk (e.g., bonds). These credit risks are captured as a component of market risk measures, which are monitored and managed by Market Risk.

Credit Risk, which is independent of the revenue-producing units and reports to GS Group's chief risk officer, has primary responsibility for assessing, monitoring and managing GS Group's credit risk through oversight across GS Group's global businesses. The company's framework for managing credit risk is consistent with the framework of GS Group, established by GS Group's Risk Governance Committee.

Credit Risk Management Process (Audited)

The process for managing credit risk includes the critical components of the company's risk management framework described in the "Overview and Structure of Risk Management", as well as the following:

- Monitoring compliance with established credit risk limits and reporting the company's credit exposures and credit concentrations;
- Assessing the likelihood that a counterparty will default on its payment obligations;
- Measuring the company's current and potential credit exposure and losses resulting from a counterparty default;
- Using credit risk mitigants, including collateral and hedging; and
- Maximising recovery through active workout and restructuring of claims.

The company also performs credit reviews, which include initial and ongoing analyses of the company's counterparties. A credit review is an independent analysis of the capacity and willingness of a counterparty to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the counterparty's industry, and the economic environment. Senior personnel, with expertise in specific industries, inspect and approve credit reviews and internal credit ratings.

The credit risk management systems capture credit exposure to individual counterparties and on an aggregate basis to counterparties and their subsidiaries. These systems also provide management with comprehensive information about aggregate credit risk by product, internal credit rating, industry, country and region.

Risk Measures

Credit risk is measured based on the potential loss in the event of non-payment by a counterparty using current and potential exposure. For derivatives and securities financing transactions, current exposure represents the amount presently owed to the company after taking into account applicable netting and collateral arrangements, while potential exposure represents the company's estimate of the future exposure that could arise over the life of a transaction based on market movements within a specified confidence level. Potential exposure also takes into account netting and collateral arrangements.

Stress Tests

The company conducts regular stress tests to calculate the credit exposures, including potential concentrations that would result from applying shocks to counterparty credit ratings or credit risk factors (e.g., currency rates, interest rates, equity prices). These shocks cover a wide range of moderate and more extreme market movements including shocks to multiple risk factors, consistent with the occurrence of a severe market or economic event. In the case of sovereign default the company estimates the direct impact of the default on its sovereign credit exposures, changes to its credit exposures arising from potential market moves in response to the default, and the impact of credit market deterioration on corporate borrowers and counterparties that may result from the sovereign default. Unlike potential exposure, which is calculated within a specified confidence level, stress testing does not generally assume a probability of these events occurring. The company also performs company-wide stress tests. See "Overview and Structure of Risk Management" for information about company-wide stress tests.

Strategic Report

Limits

Credit limits are used at various levels to manage the size and nature of the company's credit exposures. The GSI Board Risk Committee and the GSI Risk Committee approve credit risk limits at the company-wide, business and product level, consistent with the company's risk appetite. Furthermore, the GSI Risk Committee approves the framework that governs the setting of credit risk sub-limits at the company level, which is delegated to Credit Risk (through delegated authority from GS Group's Risk Governance Committee).

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

Risk Mitigants

To reduce credit exposures on derivatives and securities financing transactions, the company may enter into netting agreements with counterparties that permit it to offset receivables and payables with such counterparties. The company may also reduce credit risk with counterparties by entering into agreements that enable it to obtain collateral from them on an upfront or contingent basis and/or to terminate transactions if the counterparty's credit rating falls below a specified level. The company monitors the fair value of the collateral to ensure that credit exposures are appropriately collateralised. The company seeks to minimise exposures where there is a significant positive correlation between the creditworthiness of counterparties and the market value of collateral received.

When the company does not have sufficient visibility into a counterparty's financial strength or when it believes a counterparty requires support from its parent company, the company may obtain third-party guarantees of the counterparty's obligations. The company may also mitigate its credit risk using credit derivatives.

Credit Exposures (Audited)

The company's credit exposures are described further below.

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

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

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

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

Strategic Report

The tables below present the company's gross credit exposure to financial assets and net credit exposure after taking account of assets captured by market risk in the company's risk management process, counterparty netting (i.e., the netting of financial assets and 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.

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

\$ in millions	Financial instruments		Cash at bank and in hand	Debtors	Total
	owned	Collateralised agreements			
As of November 2019					
Gross credit exposure	\$ 788,407	\$ 156,348	\$ 73,256	\$ 22,397	\$ 1,040,408
Assets captured by market risk	(101,104)	-	-	-	(101,104)
Counterparty netting	(611,789)	(65,240)	(4,199)	-	(681,228)
Cash collateral	(40,382)	-	(39,222)	-	(79,604)
Security collateral received	(15,939)	(88,933)	(10,159)	-	(115,031)
Net credit exposure	\$ 19,193	\$ 2,175	\$ 19,676	\$ 22,397	\$ 63,441

As of November 2018					
Gross credit exposure	\$ 594,129	\$ 203,334	\$ 64,487	\$ 24,396	\$ 886,346
Assets captured by market risk	(76,093)	-	-	-	(76,093)
Counterparty netting	(449,860)	(83,336)	(5,450)	-	(538,646)
Cash collateral	(35,148)	-	(32,439)	-	(67,587)
Security collateral received	(14,459)	(116,837)	(7,415)	-	(138,711)
Net credit exposure	\$ 18,569	\$ 3,161	\$ 19,183	\$ 24,396	\$ 65,309

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

\$ in millions	Investment-Grade		Non-Investment-Grade / Unrated	Total
	Grade	Grade		
As of November 2019				
Gross credit exposure	\$ 888,440	\$ 151,968	\$ 151,968	\$ 1,040,408
Assets captured by market risk	-	(101,104)	(101,104)	(101,104)
Counterparty netting	(665,664)	(15,564)	(15,564)	(681,228)
Cash collateral	(70,607)	(8,997)	(8,997)	(79,604)
Security collateral received	(95,424)	(19,607)	(19,607)	(115,031)
Net credit exposure	\$ 56,745	\$ 6,696	\$ 6,696	\$ 63,441

As of November 2018				
Gross credit exposure	\$ 762,094	\$ 124,252	\$ 124,252	\$ 886,346
Assets captured by market risk	-	(76,093)	(76,093)	(76,093)
Counterparty netting	(522,194)	(16,452)	(16,452)	(538,646)
Cash collateral	(59,579)	(8,008)	(8,008)	(67,587)
Security collateral received	(122,421)	(16,290)	(16,290)	(138,711)
Net credit exposure	\$ 57,900	\$ 7,409	\$ 7,409	\$ 65,309

\$ in millions	Investment-Grade				Total
	AAA	AA	A	BBB	
As of November 2019					
Gross credit exposure	\$ 30,513	\$ 83,355	\$ 677,734	\$ 96,838	\$ 888,440
Counterparty netting	(3,525)	(42,927)	(572,147)	(47,065)	(665,664)
Cash collateral	(9,529)	(13,099)	(30,812)	(17,167)	(70,607)
Security collateral received	(571)	(15,343)	(57,495)	(22,015)	(95,424)
Net credit exposure	\$ 16,888	\$ 11,986	\$ 17,280	\$ 10,591	\$ 56,745

As of November 2018					
Gross credit exposure	\$ 28,353	\$ 78,956	\$ 561,437	\$ 93,348	\$ 762,094
Counterparty netting	(2,630)	(33,438)	(439,612)	(46,514)	(522,194)
Cash collateral	(6,305)	(10,846)	(25,695)	(16,733)	(59,579)
Security collateral received	(746)	(22,588)	(78,793)	(20,294)	(122,421)
Net credit exposure	\$ 18,672	\$ 12,084	\$ 17,337	\$ 9,807	\$ 57,900

\$ in millions	Non-Investment-Grade / Unrated		
	BB or lower	Unrated	Total
As of November 2019			
Gross credit exposure	\$ 47,813	\$ 104,155	\$ 151,968
Assets captured by market risk	-	(101,104)	(101,104)
Counterparty netting	(15,547)	(17)	(15,564)
Cash collateral	(8,916)	(81)	(8,997)
Security collateral received	(18,041)	(1,566)	(19,607)
Net credit exposure	\$ 5,309	\$ 1,387	\$ 6,696

As of November 2018			
Gross credit exposure	\$ 46,412	\$ 77,840	\$ 124,252
Assets captured by market risk	-	(76,093)	(76,093)
Counterparty netting	(16,423)	(29)	(16,452)
Cash collateral	(7,993)	(15)	(8,008)
Security collateral received	(16,158)	(132)	(16,290)
Net credit exposure	\$ 5,838	\$ 1,571	\$ 7,409

In the table above, the unrated net credit exposure of \$1.39 billion as of November 2019 and \$1.57 billion as of November 2018 related to financial assets for which the company has not assigned an internally determined public rating agency equivalent.

In addition to credit risk on financial assets, the company also has credit exposure in respect of contingent and forward starting collateralised agreements. The company's gross credit exposure related to these activities is \$63.29 billion as of November 2019 and \$60.53 billion as of November 2018. However, this will be mitigated by collateral of approximately \$62.69 billion as of November 2019 and approximately \$60.06 billion as of November 2018 if these commitments are fulfilled. As a result, the company's net credit exposure to these commitments was approximately \$601 million as of November 2019 and approximately \$473 million as of November 2018.

Strategic Report

Impairment (Audited)

The company's financial assets measured at amortised cost were \$160.42 billion as of November 2019 and \$144.66 billion as of November 2018, which are all classified within stage 1 of the company's impairment model, namely, they were not credit-impaired on initial recognition and there has been no significant increase in credit risk since initial recognition. The expected credit losses (ECL) on these financial instruments were not material as of both November 2019 and November 2018. There have been no significant changes in estimation techniques or significant assumptions made during the reporting period.

Credit Concentrations (Audited)

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

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

The table below presents the net credit exposure by industry and region.

<i>\$ in millions</i>	As of	
	November 2019	November 2018
Credit Exposure by Industry		
Funds	\$ 7,429	\$ 8,038
Financial Institutions	29,535	25,703
Sovereign	21,896	26,033
Natural Resources & Utilities	738	1,883
Diversified Industrials	1,178	1,230
Other (including Special Purpose Vehicles)	2,665	2,422
Total	\$63,441	\$65,309
Credit Exposure by Region		
EMEA	\$41,042	\$43,486
Americas	15,070	14,407
Asia	7,329	7,416
Total	\$63,441	\$65,309

Collateral obtained by the company related to derivative assets is principally cash and is held by the company or a third-party custodian. Collateral obtained by the company related to collateralised agreement transactions is primarily government and agency obligations and equities.

Operational Risk Management

Overview (Audited)

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.

Potential types of loss events related to internal and external operational risk include:

- Clients, products and business practices;
- Execution, delivery and process management;
- Business disruption and system failures;
- Employment practices and workplace safety;
- Damage to physical assets;
- Internal fraud; and
- External fraud.

Operational Risk, which is independent of revenue-producing units, and reports to GS Group's chief risk officer, has primary responsibility for developing and implementing a formalised framework for assessing, monitoring and managing operational risk with the goal of maintaining GS Group's exposure to operational risk at levels that are within its risk appetite. The company's framework for managing operational risk is consistent with, and part of, the GS Group framework.

Strategic Report

Operational Risk Management Process (Audited)

The company's process for managing operational risk includes the critical components of the company's risk management framework described in the "Overview and Structure of Risk Management", including a comprehensive data collection process, as well as company-wide policies and procedures, for operational risk events.

Top-down and bottom-up approaches are combined to manage and measure operational risk. From a top-down perspective, senior management assesses company-wide and business-level operational risk profiles. From a bottom-up perspective, the first and second lines of defence are responsible for risk identification and risk management on a day-to-day basis, including escalating operational risks to senior management.

The company has a comprehensive control framework designed to provide a well-controlled environment to minimise operational risks. In the company, the EMEA Operational Risk Committee is responsible for the ongoing approval and monitoring of the frameworks, policies, parameters, limits and thresholds which govern the company's operational risks.

The operational risk management framework is in part designed to comply with the operational risk measurement rules under Basel III and has evolved based on the changing needs of the company's businesses and regulatory guidance.

Policies are in place that require all employees to report and escalate operational risk events. When operational risk events are identified, policies require that the events be documented and analysed to determine whether changes are required in the systems and/or processes to further mitigate the risk of future events.

Operational risk management applications are used to capture and organise operational risk event data and key metrics. One of the company's key risk identification and assessment tools is an operational risk and control self-assessment process, which is performed by the company's managers. This process consists of the identification and rating of operational risks, on a forward-looking basis, and the related controls. The results from this process are analysed to evaluate operational risk exposures and identify businesses, activities or products with heightened levels of operational risk.

Risk Measurement

The company's operational risk exposure is measured using both statistical modelling and scenario analyses, which involve qualitative and quantitative assessments of internal and external operational risk event data, business environment and internal control factors for each of the company's businesses.

The results from these scenario analyses are used to monitor changes in operational risk and to determine business lines that may have heightened exposure to operational risk. These analyses are used in the determination of the appropriate level of operational risk capital to hold. The company also performs company-wide stress tests. See "Overview and Structure of Risk Management" for information about company-wide stress tests.

Types of Operational Risks

Increased reliance on technology and third-party relationships has resulted in increased operational risks, such as information and cyber security risk, third-party risk and business resilience risk. The company manages those risks as follows:

Information and Cyber Security Risk. Information and cyber security risk is the risk of compromising the confidentiality, integrity or availability of the company's data and systems, leading to an adverse impact to the company, its reputation, its clients and/or the broader financial system. The company seeks to minimise the occurrence and impact of unauthorised access, disruption or use of information and/or information systems. The company deploys and operates preventive and detective controls and processes to mitigate emerging and evolving information security and cyber security threats, including monitoring the company's network for known vulnerabilities and signs of unauthorised attempts to access its data and systems. There is increased information risk through diversification of the company's data across external service providers, including use of a variety of cloud-provided or -hosted services and applications. See "Principal Risks and Uncertainties" for further information about information and cyber security risk.

Third-Party Risk. Third-party risk, including vendor risk, is the risk of an adverse impact due to reliance on third parties performing services or activities on the company's behalf. These risks may include legal, regulatory, information security, reputational, operational or any other risks inherent in engaging a third party. The company identifies, manages and reports key third-party risks and conducts due diligence across multiple risk domains, including information security and cyber security, resilience and additional third-party dependencies. GS Group's Third-Party Risk Program monitors, reviews and reassesses third-party risks on an ongoing basis. See "Principal Risks and Uncertainties" for further information about third-party risk.

Strategic Report

Business Resilience Risk. Business resilience risk is the risk of disruption to the company’s critical processes. The company monitors threats and assess risks and seeks to ensure its state of readiness in the event of a significant operational disruption to the normal operations of its critical functions or their dependencies, such as, critical facilities, systems, third parties, data and/or personnel. The company approaches BCP through the lens of business and operational resilience. The resilience framework defines the fundamental principles for BCP and crisis management to ensure that critical functions can continue to operate in the event of a disruption. The business continuity programme is comprehensive, consistent across GS Group and up-to-date, incorporating new information, techniques and technologies as and when they become available, and the company’s resilience recovery plans incorporate and test specific and measurable recovery time objectives in accordance with local market best practices and regulatory requirements, and under specific scenarios.

Model Risk Management

Overview (Audited)

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 its regulatory capital.

Model Risk, which is independent of the revenue-producing units, model developers, model owners and model users, and reports to GS Group’s chief risk officer, has primary responsibility for assessing, monitoring and managing GS Group’s model risk through oversight across GS Group’s global businesses, and provides periodic updates to senior management, risk committees and GS Group’s Risk Committee of the Board. The company’s framework for managing model risk is consistent with, and part of, the GS Group’s framework.

GS Group’s model risk management framework is managed through a governance structure and risk management controls, which encompass standards designed to ensure it maintains a comprehensive model inventory, including risk assessment and classification, sound model development practices, independent review and model-specific usage controls. GS Group’s Firmwide Model Risk Control Committee oversees the model risk management framework.

Model Review and Validation Process

Model Risk consists of quantitative professionals who perform an independent review, validation and approval of the models. This review includes an analysis of the model documentation, independent testing, an assessment of the appropriateness of the methodology used, and verification of compliance with model development and implementation standards.

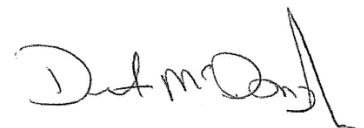
The company regularly refines and enhances its models to reflect changes in market or economic conditions and its business mix. All models are reviewed on an annual basis, and new models or significant changes to existing models and their assumptions are approved prior to implementation.

The model validation process incorporates a review of models and trade and risk parameters across a broad range of scenarios (including extreme conditions) in order to critically evaluate and verify the model’s conceptual soundness, suitability of calculation techniques, accuracy in reflecting the characteristics of the related product and its significant risks, and sensitivity to input parameters and assumptions, as well as the scope of testing performed by the model developers.

See “Liquidity Risk Management”, “Market Risk Management”, “Credit Risk Management”, and “Operational Risk Management” for further information about the company’s use of models within these areas.

Date of Authorisation of Issue

The strategic report was authorised for issue by the Board of Directors on March 11, 2020.



By order of the board
D. W. McDonogh
 Director
 March 23, 2020

Directors' Report

The directors present their report and the audited financial statements for the period ended November 2019.

Introduction

In accordance with section 414A of the Companies Act 2006, the directors have prepared a strategic report, which is included in Part I of this annual report and which contains a review of the company's businesses and a description of the principal risks and uncertainties facing the company. The directors have chosen to disclose the company's risk management objectives and policies, including exposures to market risk, credit risk and liquidity risk, and the future outlook of the company in the strategic report in accordance with section 414C(11) of the Companies Act 2006.

Dividends

The directors declared and paid an interim dividend of \$1.00 billion on November 26, 2019.

The directors declared and paid an interim dividend of \$2.50 billion on November 30, 2018.

Exchange Rate

The British pound/U.S. dollar exchange rate was £/\$1.2932 as of November 2019 and £/\$1.2743 as of November 2018. The average rate for the periods was £/\$1.2748 for November 2019 and £/\$1.3347 for November 2018.

Employment of Disabled Persons

Applications for employment by disabled persons are fully and fairly considered with regard to the aptitudes and abilities of each applicant. Efforts are made to enable any employees who become disabled during employment to continue their careers within GS Group. Training, career development and promotion of disabled persons are, to the extent possible, identical to that of other employees who are not disabled.

Charitable Contributions

The company made donations to charity of \$28 million for the period ended November 2019 and \$22 million for the period ended November 2018. This included donations of \$26 million for the period ended November 2019 and \$20 million for the period ended November 2018 to Goldman Sachs Gives (UK), a registered charity, for general charitable purposes in England and Wales.

Employee Involvement

It is company policy that there should be effective communication with all employees who, subject to practical and commercial considerations, should be made aware of financial and economic factors affecting the performance of the company and consulted on and involved in decisions that affect their current jobs or future prospects. Employees share in performance-based incentive schemes.

Statement on Corporate Governance with Reference to Internal Control over Financial Reporting

Management of the company is responsible for establishing and maintaining adequate internal control over financial reporting. The company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the company's financial statements for external reporting purposes in accordance with U.K. GAAP.

The company's internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.K. GAAP, and that receipts and expenditures are being made only in accordance with authorisations of management and the directors of the company; and provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use or disposition of the company's assets that could have a material effect on the company's financial statements.

Disclosure of Information to Auditors

In the case of each of the persons who are directors of the company at the date when this report was approved:

- So far as each of the directors is aware, there is no relevant audit information of which the company's auditors are unaware; and
- Each of the directors has taken all the steps that they ought to have taken as a director to make themselves aware of any relevant audit information and to establish that the company's auditors are aware of that information.

Independent Auditors

Prior to 1 October 2007, the company passed an elective resolution under section 386 of the Companies Act 1985 to dispense with the annual reappointment of auditors. PricewaterhouseCoopers LLP will, accordingly, continue in office as auditors of the company pursuant to section 487(2) of the Companies Act 2006 and paragraph 44 of Schedule 3 to the Companies Act 2006 (Commencement No. 3 Consequential Amendment, Transitional Provisions and Savings) Order 2007.

The GSI Board Audit Committee has approved the appointment of Mazars LLP as the company's statutory auditor for the financial period commencing on or after December 1, 2020.

Directors' Report

Statement of Directors' Responsibilities

The directors are responsible for preparing the strategic report, the directors' report and the financial statements in accordance with applicable law and regulations. Company law requires the directors to prepare accounts for each financial period which give a true and fair view of the state of affairs of the company as at the end of the financial period and of the profit or loss of the company for that period. In preparing those accounts, the directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable accounting standards have been followed subject to any material departures disclosed and explained in the financial statements; and
- Prepare the accounts on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping adequate accounting records which disclose with reasonable accuracy at any time the financial position of the company and to enable them to ensure that the accounts comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and, hence, for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the company's financial statements on the Goldman Sachs website. Legislation in the U.K. governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The directors confirm to the best of their knowledge:

- The financial statements, prepared in accordance with applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the company; and
- The strategic report includes a fair review of the development and performance of the business and the position of the company, together with a description of the principal risks and uncertainties that the company faces.

Directors

The directors of the company who served throughout the period and to the date of this report, except where noted, were:

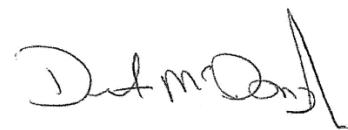
Name

J. M. D. Barroso, Chairman
 S. A. Boyle
 C. Cripps (appointed on April 1, 2019)
 R. J. Gnodde, Chief executive officer
 Lord Grabiner QC
 N. Harman
 S. S. Kilsby (resigned December 31, 2018)
 D. W. McDonogh
 T. L. Miller OBE
 E. E. Stecher
 M. O. Winkelman

No director had, at the period end, any interest requiring note herein.

Date of Authorisation of Issue

The financial statements were authorised for issue by the Board of Directors on March 11, 2020.



By order of the board
D. W. McDonogh
 Director
 March 23, 2020

Independent auditors' report to the members of Goldman Sachs International (unlimited company)

Report on the audit of the financial statements

Opinion

In our opinion, Goldman Sachs International's ("the company") financial statements:

- give a true and fair view of the state of the company's affairs as of November 30, 2019 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report, which comprise: the Balance Sheet as of November 30, 2019; the Profit and Loss Account, the Statements of Comprehensive Income, the Statements of Cash Flows, the Statements of Changes in Equity for the year then ended; and the Notes to the Financial Statements, which include a description of the significant accounting policies and other explanatory information.

Certain required disclosures have been presented in the Strategic Report in the Annual Report rather than in the Notes to the Financial Statements. The disclosures identified as audited within the Strategic Report form an integral part of the financial statements.

Our opinion is consistent with our reporting to the GSI Board Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the U.K., which includes the Financial Reporting Council's ("FRC") Ethical Standard as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the company.

Other than those disclosed in Note 6 'Administrative Expenses' to the financial statements, we have provided no other non-audit services to the company in the year from December 1, 2018 to November 30, 2019.

Our audit approach

Context

The comparative period disclosed in these financial statements is the eleven month period ended November 30, 2018.

Overview

- Overall materiality: \$240 million (2018: \$183 million) based on 0.75% of total Tier 1 capital resources (2018: 0.5% of total regulatory capital resources) as set out on page 10 of the Annual Report.
- Audit scope: We perform a full scope audit of the financial statements of the company as a whole as a single component. The scope of the audit and the nature, timing and extent of audit procedures were determined by our risk assessment, the financial significance of financial statement line items and qualitative factors (including history of misstatement through fraud or error).
- Key audit matters: The key area of focus which was of the most significance in the audit was the valuation of financial assets and liabilities, including those which are included within level 3 of the fair value hierarchy. We also considered the impact of the outbreak of a novel strain of coronavirus (COVID-19) on the company.
- We discussed our plan including, the identification of key audit matters, with the GSI Board Audit Committee in July 2019 and November 2019.

Independent auditors' report to the members of Goldman Sachs International (unlimited company)

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the company and industry, we identified that the principal risks of non-compliance with laws and regulations related to rules of the Financial Conduct Authority ("FCA") and the Prudential Regulation Authority ("PRA"), and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the preparation of the financial statements such as the Companies Act 2006 and the Companies and Group Accounts Regulations 2008.

We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls) and determined that the principal risks were related to the posting of inappropriate journal entries and management bias through the manipulation of the fair value of financial assets and liabilities.

The engagement team shared this risk assessment with PwC network firms supporting the audit and designed audit procedures to address these risks. Audit procedures performed by the engagement team and/or other auditors included:

- Discussions with management and those charged with governance in relation to known or suspected instances of non-compliance with laws and regulation and fraud;
- Evaluating and testing of the operating effectiveness of management's entity level controls designed to prevent and detect irregularities, in particular their Code of Conduct and Whistleblowing procedures;
- Assessing matters reported on the company's whistleblowing helpline and the results of management's investigation of such matters;

- Reviewing key correspondence with regulatory authorities (the FCA and the PRA) in relation to compliance and any regulatory proceedings;
- Identifying and testing journal entries, in particular any journal entries posted by senior management;
- Challenging assumptions and judgements made by management in relation to the fair value measurement of financial assets and liabilities. Our procedures included testing the effectiveness of management's controls over the fair value of financial assets and liabilities and performing an independent valuation of a sample of such items at the year-end; and
- Incorporated unpredictability into the nature, timing and/or extent of our testing.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Independent auditors' report to the members of Goldman Sachs International (unlimited company)

Key audit matter

Valuation of financial assets and liabilities held at fair value

Refer to Note 28 'Financial Assets and Liabilities' in the financial statements.

In accordance with the accounting policies set out in Note 2 'Summary of Significant Accounting Policies' to the financial statements, the majority of the financial assets and liabilities are recorded in the balance sheet at fair value and changes in fair value are recorded in net revenues. Total financial assets and liabilities at fair value were \$879.99 billion and \$837.68 billion, respectively, as of November 30, 2019. The audit of the valuation of financial assets and liabilities required significant audit resources and involved the most significant assessed risks of material misstatement and therefore represents a key audit matter.

The fair values for substantially all of the company's financial assets and liabilities measured at fair value detailed in Note 28 'Financial Assets and Liabilities' are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. The valuations of derivative financial instruments are calculated by financial models using a variety of inputs. Most of the company's derivatives are traded in active markets and external observable inputs are available to support management's valuations.

The company also enters into complex and less liquid cash and derivative financial instruments where a limited or no active market exists. In these instances, there is less observable evidence to support the valuations and hence there is greater estimation uncertainty. When one or more valuation inputs are unobservable and significant, the financial instrument is classified as level 3 in the valuation hierarchy. Level 3 financial assets and liabilities measured at fair value were \$5.33 billion and \$12.31 billion, respectively, as of November 30, 2019.

We performed a risk assessment of the financial instruments held by the company using our industry experience and knowledge of the company's business. We used this analysis to identify areas of greater judgement and focus our testing.

We concluded that the higher assessed risks of material misstatement relate to the valuation of certain credit and equity derivative financial instruments classified as level 3. Within credit derivatives, this included the valuation of a portfolio of financial instruments sensitive to secured funding spreads, the methodology for which involves a key judgement, and within equity derivatives, a portfolio of financial instruments sensitive to correlations which are unobservable.

How our audit addressed the key audit matter

We understood and evaluated the design and tested the operational effectiveness of key controls over the valuation of financial assets and liabilities. These controls included:

- Validation of new and existing models by a specialist team within the risk function, as well as access and change management controls in respect of models in use;
- The monthly price verification process performed by the Controller's function using prices and model valuation inputs sourced from third parties; and
- Calculation and approval of key valuation adjustments.

We noted no significant exceptions in the design or operating effectiveness of these controls and we determined we could rely on these controls for the purposes of our audit. In addition, we performed the substantive testing described below.

We tested the valuation of a sample of cash instruments to third party sources. We utilised internal valuation experts to revalue a sample of derivative and cash financial instruments, including level 3 instruments, using independent models.

In relation to a portfolio of credit derivatives in level 3, we evaluated management's methodology for determining secured funding spreads, tested the associated valuation inputs to external sources and reperformed the valuation of a sample. Additionally, we valued a sample of level 3 equity derivatives and, to the extent available, independently sourced inputs, such as correlation. Where independent inputs are not available for the relevant correlations, we independently estimated the correlation.

We evaluated the methodology and underlying assumptions used to determine valuation adjustments. We tested a sample of valuation adjustments as at the year-end.

Based on the work performed, we found management's estimates of the fair value of financial assets and liabilities to be supported by the evidence obtained.

We performed testing to validate that management had allocated derivative financial instruments to the appropriate level within the fair value hierarchy in line with the established policy, and that the policy classifications were appropriate.

We read and assessed the disclosures in Note 28 'Financial Assets and Liabilities' regarding significant unobservable inputs and the fair value hierarchy and found them to be appropriate.

Independent auditors' report to the members of Goldman Sachs International (unlimited company)

Key audit matter

Impact of the outbreak of COVID-19 on the financial statements

Refer to Note 30 'Non-Adjusting Post Balance Sheet Events' in the financial statements.

Since the balance sheet date there has been a global pandemic from the outbreak of COVID-19. During the latter stages of finalising the financial statements, the potential impact of COVID-19 became significant and is causing widespread disruption to financial markets and normal patterns of business activity across the world, including the U.K.

The directors have considered the impact on the financial statements and have concluded that the matter is a non-adjusting post balance sheet event, the financial impact of which cannot be reliably estimated at this stage, and that the going concern basis of preparation is appropriate.

How our audit addressed the key audit matter

We critically assessed directors' conclusion that the matter be treated as a non-adjusting post balance sheet event and that the financial impact cannot be reliably estimated at this stage. We considered:

- The timing of the development of the outbreak across the world and in the U.K.; and
- How the financial statements and business operations of the company might be impacted by the disruption.

Based on the work performed, we are satisfied that the matter has been appropriately evaluated and reflected in the financial statements.

In forming our conclusions over going concern, we evaluated whether management's going concern assessment considered impacts arising from COVID-19. Our procedures in respect of going concern included:

- We reviewed management's going concern assessment. We made enquiries of management to understand the potential impact of the COVID-19 on the company's financial performance, business operations and regulatory capital and liquidity ratios.
- We reviewed the company's most recent Internal Capital Adequacy Assessment Process and Internal Liquidity Adequacy Assessment Process which contain the results of the company's latest stress tests.

Our reporting on going concern is set out below.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, considering the structure of the company, the accounting processes and controls, and the industry in which it operates.

The company provides a variety 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 to provide financial services to clients in those regions. We consider the company and its branches to represent a single audit component.

Traders based in overseas group locations enter into transactions on behalf of the company. In these circumstances, certain internal controls relevant to financial reporting operate in those locations. In addition, there are a number of centralised functions operated by the ultimate parent company, The Goldman Sachs Group, Inc., in the U.S. or in group shared service centres in other locations that are relevant to the audit of the company. We determined the scope of the work required in each of these locations and issued instructions to PwC network firms. We interacted regularly with the firms responsible for the work throughout the course of the audit. This included reviewing key working papers and discussing and challenging the results of work in higher risk areas of the audit. We concluded that the procedures performed on our behalf were sufficient for the purposes of issuing our opinion.

Independent auditors' report to the members of Goldman Sachs International (unlimited company)

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

<i>Overall materiality</i>	\$240 million (2018: \$183 million).
<i>How we determined it</i>	0.75% of total Tier 1 capital resources (2018: 0.5% of total regulatory capital resources) as set out on page 10 of the Annual Report.
<i>Rationale for benchmark applied</i>	The immediate and ultimate parent companies, management, certain creditors (e.g. note holders) and the company's regulators are the primary users of the financial statements. The level of Tier 1 capital resources is a key area of focus for these users.

We agreed with the GSI Board Audit Committee that we would report to them misstatements identified during our audit above \$12 million (2018: \$9 million) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

ISAs (UK) require us to report to you when:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect to the above matters.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the company's ability to continue as a going concern.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the U.K. Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit and ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended November 30, 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.

Independent auditors' report to the members of Goldman Sachs International (unlimited company)

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors' Responsibilities set out on page 43, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment

We were appointed by the directors on September 22, 1988 to audit the financial statements for the year ended November 24, 1989 and subsequent financial periods. The period of total uninterrupted engagement is 31 years, covering the years ended November 24, 1989 to November 30, 2019.

Jonathan Holloway (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

March 23, 2020

Profit and Loss Account

<i>\$ in millions</i>	Note	Period Ended November	
		2019	2018
Net revenues	4, 5	\$ 8,096	\$ 7,866
Administrative expenses	6	(5,440)	(4,607)
Operating profit		2,656	3,259
Interest payable and similar expenses	9	(243)	(237)
Net finance income	10	13	8
Profit before taxation		2,426	3,030
Tax on profit	12	(624)	(832)
Profit for the financial period		\$ 1,802	\$ 2,198

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

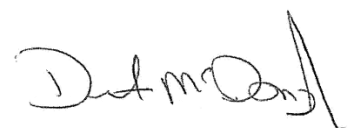
Statements of Comprehensive Income

<i>\$ in millions</i>	Note	Period Ended November	
		2019	2018
Profit for the financial period		\$ 1,802	\$ 2,198
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss			
Actuarial profit/(loss) relating to the pension scheme	10	(159)	61
Debt valuation adjustment		(201)	465
U.K. deferred tax attributable to the components of other comprehensive income	17	90	(137)
U.K. current tax attributable to the components of other comprehensive income		1	1
Other comprehensive income/(loss) for the financial period, net of tax		(269)	390
Total comprehensive income for the financial period		\$ 1,533	\$ 2,588

Balance Sheet

\$ in millions	Note	As of November	
		2019	2018
Fixed assets	13	\$ 409	\$ 315
Current assets			
Financial instruments owned (includes \$35,335 and \$20,550 pledged as collateral)	14	788,407	594,129
Collateralised agreements	15	156,348	203,334
Debtors	16	73,693	64,793
Cash at bank and in hand	24	22,397	24,396
		1,040,845	886,652
Creditors: amounts falling due within one year			
Financial instruments sold, but not yet purchased	14	(714,640)	(545,987)
Collateralised financings	18	(124,740)	(141,840)
Other creditors	19	(93,476)	(97,151)
		(932,856)	(784,978)
Net current assets		107,989	101,674
Total assets less current liabilities		108,398	101,989
Creditors: amounts falling due after more than one year			
Collateralised financings	18	(5,347)	(10,305)
Other creditors	19	(69,066)	(58,095)
		(74,413)	(68,400)
Provisions for liabilities	20	(1)	(78)
Net assets excluding pension surplus		33,984	33,511
Pension surplus	10	264	406
Net assets including pension surplus		\$ 34,248	\$ 33,917
Capital and reserves			
Called up share capital	21	\$ 590	\$ 582
Share premium account		5,196	4,864
Profit and loss account		20,330	20,070
Accumulated other comprehensive income		(168)	101
Other equity instruments	22	8,300	8,300
Total shareholder's funds		\$ 34,248	\$ 33,917

The financial statements were approved by the Board of Directors on March 11, 2020.



D. W. McDonogh
Director
March 23, 2020

Statements of Changes in Equity

\$ in millions	Note	Period Ended November	
		2019	2018
Called up share capital			
Beginning balance		\$ 582	\$ 582
Shares issued	21	8	17
Shares cancelled	21	—	(17)
Ending balance		590	582
Share premium account			
Beginning balance		4,864	4,864
Shares issued	21	332	—
Ending balance		5,196	4,864
Capital reserve (non-distributable)			
Beginning balance		—	17
Subscription for shares	21	—	(17)
Ending balance		—	—
Profit and loss account			
Beginning balance		20,070	20,727
Cumulative effect on retained earnings due to adoption of IFRS 15, net of tax		—	(5)
Profit for the financial period		1,802	2,198
Cancellation of shares	21	—	17
Interim dividends paid	23	(1,000)	(2,500)
Interest on Additional Tier 1 notes, net of tax	22	(542)	(367)
Share-based payments		452	405
Management recharge related to share-based payments		(452)	(405)
Ending balance		20,330	20,070
Accumulated other comprehensive income			
Beginning balance		101	(289)
Other comprehensive income/(loss)		(269)	390
Ending balance		(168)	101
Other equity instruments			
Beginning balance		8,300	5,800
Additional Tier 1 notes issued	22	—	2,500
Ending balance		8,300	8,300
Total shareholder's funds		\$34,248	\$33,917

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

Statements of Cash Flows

<i>\$ in millions</i>	Note	Period Ended November	
		2019	2018
Cash flows from operating activities			
Cash generated from operations	25	\$ 510	\$ 5,980
Taxation received		3	1
Taxation paid		(151)	(252)
Net cash from operating activities		362	5,729
Cash flows from investing activities			
Capital expenditure for fixed assets		(223)	(172)
Net cash used in investing activities		(223)	(172)
Cash flows from financing activities			
Receipts from issuing Additional Tier 1 notes	22	–	2,500
Receipts from issuing ordinary share capital	21	340	–
Interim dividends paid	23	(1,000)	(2,500)
Interest paid on Additional Tier 1 notes	22	(742)	(503)
Interest paid on long-term subordinated loans	19	(289)	(54)
Net cash used in financing activities		(1,691)	(557)
Net increase/(decrease) in cash and cash equivalents		(1,552)	5,000
Cash and cash equivalents, beginning balance		24,243	20,654
Foreign exchange losses on cash and cash equivalents		(332)	(1,411)
Cash and cash equivalents, ending balance	24	\$22,359	\$24,243

See Note 21 for information about non-cash activities.

Notes to the Financial Statements

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.

Basel III Pillar 3 Disclosures

The company is included in the consolidated Pillar 3 disclosures of GSG UK, as required by the CRR. GSG UK's November 2019 Pillar 3 disclosures will be made available in conjunction with the publication of its consolidated financial information at www.goldmansachs.com/disclosures.

Country-by-Country Reporting

The company is included in the consolidated country-by-country reporting disclosures of GSG UK, as required by the Capital Requirements (Country-by-Country Reporting) Regulations 2013. GSG UK's November 2019 Country-by-Country Reporting will be made available by December 31, 2020 at www.goldmansachs.com/disclosures.

Note 2.

Summary of Significant Accounting Policies

Basis of Preparation

The company prepares financial statements under U.K. GAAP. These financial statements have been prepared in accordance with FRS 101 'Reduced Disclosure Framework' (FRS 101).

These financial statements have been prepared on the going concern basis, under the historical cost convention (modified as explained in "Pension Arrangements" and "Financial Assets and Liabilities" below), and in accordance with the Companies Act 2006.

In 2018, the company changed its accounting reference date from December 31 to November 30. As such, these financial statements have been prepared for the twelve months ended November 30, 2019, with comparative information being presented for the eleven months ended November 30, 2018. As a result, amounts presented in these financial statements are not directly comparable.

The following exemptions from the disclosure requirements of International Financial Reporting Standards (IFRS) as adopted by the E.U. have been applied in the preparation of these financial statements in accordance with FRS 101:

- IFRS 2 'Share-based Payment' paragraph 45(b) and 46 to 52. These disclosures are provided in the consolidated financial statements of Group Inc.;
- IFRS 15 'Revenue from Contracts with Customers' (IFRS 15) second sentence of paragraph 110 and paragraphs 113(a), 114, 115, 118, 119(a) to (c), 120 to 127 and 129;
- IAS 1 'Presentation of Financial Statements' paragraph 38 to present comparative information in respect of:
 - IAS 1 'Presentation of Financial Statements' paragraph 79(a)(iv); and
 - IAS 16 'Property, Plant and Equipment' paragraph 73(e).
- IAS 1 'Presentation of Financial Statements' paragraphs 10(f), 16, and 40A-D;
- IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors' paragraphs 30 and 31;
- IAS 24 'Related Party Disclosures' paragraph 17; and
- IAS 24 'Related Party Disclosures' requirements to disclose transactions with companies also wholly owned within GS Group.

Notes to the Financial Statements

Consolidation

The company has elected not to prepare consolidated financial statements as permitted by section 402 of the Companies Act 2006 as its subsidiary is not material for the purpose of giving a true and fair view.

These financial statements are individual financial statements.

New Standards, Amendments and Interpretations

IFRS 16 ‘Leases’. In January 2016, the International Accounting Standards Board issued IFRS 16 ‘Leases’ (IFRS 16), which replaces IAS 17 ‘Leases’, IFRIC 4 ‘Determining whether an Arrangement contains a Lease’ and SIC-15 ‘Operating Leases – Incentives’ for annual periods beginning on or after January 1, 2019 with early adoption permitted. In November 2017, the E.U. endorsed IFRS 16.

IFRS 16 requires that, for leases that are not short-term and for low value assets, a lessee recognise on the balance sheet a right-of-use asset, representing the right to use the underlying asset for the lease term, and a lease liability, representing the liability to make lease payments. It also requires that a lessee recognises interest on the lease liability and depreciation on the right-of-use asset in the profit and loss account. In addition, this standard requires expanded disclosures about the effect that leases have on the financial position, financial performance and cash flows of the lessee, including information about the nature and terms of the lease agreements.

The company adopted this standard from December 1, 2019. Adoption of this standard did not have a material impact on the company’s balance sheet, comprehensive income or cash flows.

Accounting Policies

Revenue Recognition. Net revenues include the net profit arising from transactions, with both third parties and affiliates, in derivatives, securities and other financial instruments, and fees and commissions. This is inclusive of associated interest and dividends. Net revenues have been disclosed instead of turnover as this reflects more meaningfully the nature and results of the company’s activities.

Financial Assets and Liabilities Measured at Fair Value Through Profit or Loss

Financial assets and liabilities measured at fair value through profit or loss are recognised at fair value with realised and unrealised gains and losses as well as associated interest and dividend income and expenses included in net revenues, with the exception of debt valuation adjustments (DVA), which is recognised in other comprehensive income, unless this would create or enlarge an accounting mismatch in profit or loss. 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).

Unrealised gains and losses related to the change in fair value of financial assets and liabilities measured at fair value through profit or loss are recognised from trade date in net revenues or other comprehensive income in the case of DVA.

In applying the provisions of IFRS 9 ‘Financial Instruments’ (IFRS 9) relating to DVA, the company is departing from the requirements of paragraph 40 of Schedule 1 of SI 2008/410 relating to recognising the changes in the fair value of financial instruments in the profit or loss account. The directors consider this departure is necessary in order for the accounts to give a true and fair view. See Note 19 for further information about the cumulative impact of the company’s DVA.

Revenue from Contracts with Clients

Revenues earned from contracts with clients for services such as investment banking, investment management, and execution and clearing (contracts with clients) are recognised when the performance obligations related to the underlying transactions are completed.

If the company is principal to the transaction, the company recognises revenue on contracts with clients, gross of expenses incurred to satisfy some or all of its performance obligations. The company is principal to the transaction if it has the primary obligation to provide the service to the client. The company satisfies the performance obligation by itself, or by engaging other GS Group entities to satisfy some or all of its performance obligations on its behalf. Such revenue is recognised in net revenues and expenses incurred are recognised in administrative expenses.

Notes to the Financial Statements

Net revenues are recognised as follows:

• Investment Banking

Fees from financial advisory and underwriting engagements are recognised in profit and loss when the services related to the underlying transactions are completed under the terms of the engagement.

• Investment Management

Management fees are recognised on an accrual basis and are generally calculated as a percentage of a fund or a separately managed account's average net asset value. All management fees are recognised over the period that the related service is provided.

Incentive fees are calculated as a percentage of a fund's return or a percentage of a fund's excess return above a specified benchmark or other performance target.

• Commissions and Fees

Revenue from commissions and fees from executing and clearing client transactions on stock, options and futures markets, as well as OTC transactions is recognised in net revenues on the day the trade is executed. The company also provides third-party research services to clients in connection with soft-dollar arrangements.

Operating Leases. The company has entered into operating lease arrangements as the lessee. Leased assets are not recognised in the balance sheet. Costs in respect of operating leases, adjusted for any incentives granted by the lessor, are charged on a straight-line basis over the lease term and included in administrative expenses.

Short-Term Employee Benefits. Short-term employee benefits, such as wages and salaries, are measured on an undiscounted basis and accrued as an expense over the period in which the employee renders the service to the company. Provision is made for discretionary year-end compensation whether to be paid in cash or share-based awards where, as a result of company policy and past practice, a constructive obligation exists at the balance sheet date.

Share-Based Payments. Group Inc. issues awards in the form of restricted stock units (RSUs) and stock options to the company's employees in exchange for employee services. Awards are classified as equity settled and hence the cost of share-based transactions with employees is measured based on the grant-date fair value of the award. Share-based awards that do not require future service (i.e., vested awards, including awards granted to retirement eligible employees) are expensed immediately. Share-based awards that require future service are amortised over the relevant service period. Expected forfeitures are included in determining share-based employee compensation expense.

Group Inc. generally issues new shares of common stock upon delivery of share-based awards. Cash dividend equivalents, unless prohibited by regulation, are generally paid on outstanding RSUs. The company has also entered into a chargeback agreement with Group Inc. under which it is committed to pay the grant-date fair value as well as subsequent movements in the fair value of those awards to Group Inc. at the time of delivery to its employees. As a result, the share-based payment transaction and chargeback agreement creates a total charge to the profit and loss account based on the grant-date fair value of the awards adjusted for subsequent movements in the fair value of those awards prior to delivery.

Dividends. Final equity dividends are recognised as a liability and deducted from equity in the period in which the dividends are approved by the company's shareholder. Interim equity dividends are recognised and deducted from equity when paid.

Pension Arrangements. The company is a sponsor of a defined contribution pension plan, and a hybrid pension plan for the benefit of certain employees. The hybrid pension plan has both a defined benefit section (the Plan) and a defined contribution section. These are accounted for as follows:

- For the defined contribution pension plan and the defined contribution section of the hybrid pension plan, the contributions payable for the period are charged to operating profit. Differences between contributions payable for the period and contributions actually paid are shown as either accruals or prepayments in the balance sheet.
- For the Plan, the amounts charged to operating profit are any past service costs, administration costs and any gains or losses on settlements and curtailments. These amounts are included in direct costs of employment. The net interest is included in net finance income. Actuarial gains and losses are recognised immediately in other comprehensive income. Plan assets are measured at fair value and Plan liabilities are measured on an actuarial basis using the projected unit credit method and discounted at a rate equivalent to the current rate of return on a high-quality corporate bond of equivalent currency and term to the Plan liabilities. Full actuarial valuations are obtained at least triennially and updated at each balance sheet date. Any surplus or deficit of Plan assets over Plan liabilities is recognised in the balance sheet as an asset (surplus) or liability (deficit).

Notes to the Financial Statements

Fixed Assets.

Tangible Fixed Assets

Tangible fixed assets are stated at cost less accumulated depreciation and provision for impairment. Fixtures, fittings and equipment are depreciated on a straight-line basis over their estimated useful lives, which is between 3 to 7 years. Depreciation is included in administrative expenses.

Leasehold improvements are depreciated over the shorter of the useful economic life of the asset or the remaining life of the lease when the asset is brought into use. Depreciation policies are reviewed on an annual basis.

Intangible Fixed Assets

Intangible fixed assets are stated at cost less accumulated amortisation and provision for impairment. Subject to the recognition criteria in IAS 38 'Intangible Assets' being met, costs incurred during the period that are directly attributable to the development or improvement of new business application software are capitalised as assets in the course of construction. Assets in the course of construction are transferred to computer software once completed and ready for their intended use.

Computer software is amortised on a straight-line basis over its estimated useful life, which is three years. No amortisation is charged on assets in the course of construction. Amortisation is included in administrative expenses and the amortisation policies are reviewed on an annual basis.

Intangible fixed assets are tested for impairment whenever events or changes in circumstances suggest that an asset's or asset group's carrying value may not be fully recoverable.

Fixed Asset Investments

Fixed asset investments are stated at cost or amortised cost, as applicable, less provision for impairment. Amortisation is included in administrative expenses.

Cash at Bank and In Hand. This includes cash at bank and in hand and highly liquid overnight deposits held in the ordinary course of business.

Foreign Currencies. The company's financial statements are presented in U.S. dollars, which is also the company's functional currency.

Transactions denominated in foreign currencies are translated into U.S. dollars at rates of exchange ruling on the date the transaction occurred. Monetary assets and liabilities, and non-monetary assets and liabilities measured at fair value, denominated in foreign currencies are translated into U.S. dollars at rates of exchange ruling at the balance sheet date. Foreign exchange gains and losses are recognised in operating profit.

Financial Assets and Liabilities.

Recognition and Derecognition

Financial assets and liabilities, other than cash instruments purchased or sold in regular way transactions, are recognised when the company becomes party to the contractual provisions of the instrument. Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire or if the company transfers the financial asset and the transfer qualifies for derecognition. A transferred financial asset qualifies for derecognition if the company transfers substantially all the risks and rewards of ownership of the financial asset or if the company neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset but does not retain control. Financial liabilities are derecognised only when they are extinguished, i.e., when the obligation specified in the contract is discharged or cancelled or expires.

Cash instruments purchased or sold in regular way transactions are recognised and derecognised using settlement date accounting.

Notes to the Financial Statements

Classification and Measurement: Financial Assets

The company classifies financial assets as subsequently measured at amortised cost or fair value through profit or loss on the basis of both the company's business model for managing financial assets and the contractual cash flow characteristics of the financial assets. The business model reflects how the company manages particular groups of assets in order to generate future cash flows. Where the company's business model is to hold the assets to collect contractual cash flows, the company subsequently assesses whether the financial assets' cash flows represent solely payments of principal and interest. Financial assets with embedded derivatives (hybrid instruments) that are not bifurcated from their host are also subject to the same assessment.

• Financial assets measured at amortised cost.

Financial assets that are held for the collection of contractual cash flows and have cash flows that represent solely payments of principal and interest are measured at amortised cost. The company considers whether the cash flows represent basic lending arrangements, and where contractual terms introduce exposure to risk or volatility inconsistent with a basic lending arrangement, the financial asset is mandatorily measured at fair value through profit or loss (see below).

Financial assets measured at amortised cost are initially measured at fair value plus transaction costs and subsequently at amortised cost using the effective interest method. The effective interest method is a method of calculating the amortised cost of a financial instrument and allocating the interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset or, when appropriate, a shorter period to the net carrying amount of the financial asset. When calculating the effective interest rate, the company estimates cash flows considering all contractual terms of the financial asset but does not consider future credit losses. Finance revenue is recorded in net revenues. Financial assets measured at amortised cost include:

- Certain collateralised agreements, which consists of certain resale agreements and substantially all securities borrowed;
- Substantially all debtors; and
- Cash at bank and in hand.

• Financial assets mandatorily measured at fair value through profit or loss. Financial assets that are not held for the collection of contractual cash flows and/or do not have cash flows that represent solely payments of principal and interest are mandatorily measured at fair value through profit or loss. Financial assets mandatorily measured at fair value are initially measured at fair value with transaction costs expensed in profit or loss. Such financial assets are subsequently measured at fair value with gains or losses recognised in net revenues. Financial assets mandatorily measured at fair value include:

- Financial instruments owned, which consists of cash instruments and derivative instruments;
- Certain collateralised agreements, which consists of substantially all resale agreements and certain securities borrowed; and
- Certain debtors, which consists of transfers of assets accounted for as secured loans rather than purchases, and prepaid commodity contracts.

Classification and Measurement: Financial Liabilities

The company classifies its financial liabilities into the below categories based on the purpose for which they were acquired or originated.

• Financial liabilities held for trading. Financial liabilities held for trading are initially measured at fair value and subsequently at fair value through profit or loss, with gains or losses recognised in net revenues. Financial liabilities held for trading include financial instruments sold, but not yet purchased, which consists of:

- Cash instruments; and
- Derivative instruments.

• Financial liabilities designated at fair value through profit or loss. The company designates certain financial liabilities at fair value through profit or loss. Financial liabilities designated at fair value through profit or loss are initially measured at fair value and subsequently at fair value through profit or loss, with DVA being recognised in other comprehensive income, if it does not create or enlarge an accounting mismatch, and the remaining changes in the fair value being recognised in net revenues. Amounts recognised in other comprehensive income attributable to own credit spreads are not subsequently transferred to profit or loss, even upon derecognition of the financial liability. The primary reasons for designating such financial liabilities at fair value through profit or loss are:

- To eliminate or significantly reduce a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases; and

Notes to the Financial Statements

- The group of financial liabilities, or financial assets and liabilities, is managed and its performance evaluated on a fair value basis.

Financial liabilities designated at fair value through profit or loss include:

- Substantially all repurchase agreements;
- Securities loaned within FICC Client Execution;
- Secured debt securities issued, intercompany loans and other borrowings, which consist of hybrid financial instruments and transfers of assets accounted for as financings rather than sales;
- Certain unsecured debt securities issued and other borrowings, which consist of hybrid financial instruments; and
- Certain other creditors, which consist of certain intercompany loans, and prepaid commodity contracts.

Hybrid financial instruments are instruments that contain bifurcated embedded derivatives. If the company elects to bifurcate the embedded derivative from the associated debt, the derivative is accounted for at fair value and the host contract is accounted for at amortised cost, adjusted for the effective portion of any fair value hedges. If the company does not elect to bifurcate, the entire hybrid financial instrument is designated at fair value through profit or loss.

- **Financial liabilities measured at amortised cost.** Financial liabilities measured at amortised cost are initially measured at fair value plus transaction costs and subsequently measured at amortised cost using the effective interest method. See “Financial assets measured at amortised cost” above for further information on the effective interest method. Finance costs, including discounts allowed on issue, are recorded in net revenues with the exception of interest on long-term subordinated loans, which is recorded in interest payable and similar expenses. Financial liabilities measured at amortised cost include:
 - Certain repurchase agreements and substantially all securities loaned; and
 - Certain other creditors that have not been designated at fair value through profit or loss.

Impairment

The company assesses the expected credit losses associated with financial assets measured at amortised cost on a forward-looking basis in accordance with the provisions of IFRS 9. The measurement of expected credit losses reflects an unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes, the time value of money, and reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions. Expected credit losses are recorded in net revenues.

The company’s impairment model is based on changes in credit quality since initial recognition of financial assets measured at amortised cost and incorporates the following three stages:

- **Stage 1.** Financial assets measured at amortised cost that are not credit-impaired on initial recognition and there has been no significant increase in credit risk since initial recognition. The ECL is measured at an amount equal to the expected credit losses that result from default events possible within the next twelve months.
- **Stage 2.** Financial assets measured at amortised cost where there has been a significant increase in credit risk since initial recognition, however not yet deemed to be credit-impaired. The ECL is measured based on expected credit losses on a lifetime basis.
- **Stage 3.** Financial assets measured at amortised cost that are in default, or are defined as credit-impaired. The ECL is measured based on expected credit losses on a lifetime basis.

Determination of the relevant staging for each financial asset is dependent on the definition of ‘significant increase in credit risk’ (stage 1 to stage 2) and the definition of ‘credit-impaired’ (stage 3). The company considers a financial asset to have experienced a significant increase in credit risk when certain quantitative or qualitative conditions are met. Quantitative thresholds include absolute probability of default thresholds on investment-grade financial assets and relative probability of default thresholds on non-investment grade financial assets. Qualitative review is also performed as part of the company’s credit risk management process, including a back-stop consideration of 30 days past due. The company considers a financial asset to be credit-impaired when it meets Credit Risk’s definition of default, which is either when the company considers that the obligor is unlikely to pay its credit obligations to GS Group in full, without recourse by the company to actions such as realising security (if held), or the obligor has defaulted on a payment and/or is past due more than 90 days.

Notes to the Financial Statements

The ECL is determined by projecting the probability of default, loss given default and exposure at default for each individual exposure. To calculate expected credit losses these three components are multiplied together and discounted back to the reporting date. The discount rate used in the ECL calculation is the original effective interest rate. The probability of default represents the likelihood of a borrower defaulting on its financial obligation. The loss given default is the company's expectation of the extent of loss on the default exposure, and takes into consideration amongst other things, collateral on the financial asset. The exposure at default is the amount the company expects to be owed at the time the financial obligation defaults. The company uses internal credit risk ratings that reflect the assessment of the probability of default of individual counterparties. The company uses multiple macroeconomic scenarios within the ECL calculation, the weightings for which are subject to ongoing internal review and approval.

Forward-looking information, such as key economic variables impacting credit risk and expected credit losses, is incorporated into both the assessment of staging and the calculation of ECL. Economic variables have been forecasted using internally generated projections to provide an estimated view of the economy over the next nine quarters. After nine quarters a mean reversion approach has been used, which means that economic variables tend to either a long run average rate or a long run growth rate.

The company writes off financial assets, in whole or in part, when it has concluded that there is no reasonable expectation of recovery. When a financial asset is deemed to be uncollectable, the company concludes this to be an indicator that there is no reasonable expectation of recovery. The company still seeks to recover amounts it is legally owed in full, but which have been wholly or partially written off due to no reasonable expectation of full recovery.

Classification of Financial Liabilities and Equity

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements. A financial liability is any liability that is a contractual obligation to deliver cash or another financial asset to another entity; or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity. An equity investment is any contract that evidences a residual interest in the assets of the entity after deducting all liabilities. Instruments are evaluated to determine if they contain both liability and equity components. The initial carrying amount of a compound financial instrument is allocated first to the liability component, measured at fair value, and the equity is assigned the residual amount.

Offsetting Financial Assets and Liabilities

Financial assets and liabilities are offset and the net amount presented in the balance sheet where there is:

- Currently a legally enforceable right to set-off the recognised amounts; and
- Intent to settle on a net basis or to realise the asset and settle the liability simultaneously.

Where these conditions are not met, financial assets and liabilities are presented on a gross basis in the balance sheet.

Fair Value Measurement

See Note 28 for details about the fair value measurement of the company's financial assets and liabilities.

Fair Value Hedges

The company applies hedge accounting under IAS 39 'Financial Instruments: Recognition and Measurement' for certain interest rate swaps used to manage the interest rate exposure of certain fixed-rate unsecured long-term and short-term borrowings. To qualify for hedge accounting, the derivative hedge must be highly effective at reducing the risk from the exposure being hedged. Additionally, the company must formally document the hedging relationship at inception and test the hedging relationship to ensure the derivative hedge continues to be highly effective over the life of the hedging relationship.

Current Asset Investments

The directors are of the opinion that it would not be appropriate to classify financial instruments owned as current asset investments or to provide an analysis of such securities between those listed and unlisted.

Collateralised Agreements and Collateralised Financings.

Collateralised agreements include resale agreements and securities borrowed. Collateralised financings include repurchase agreements, securities loaned, secured debt securities issued, intercompany loans and other borrowings. See "Classification and Measurement: Financial Assets" and "Classification and Measurement: Financial Liabilities" above for details on the classification and measurement of these instruments. Collateral received or posted can be in the form of cash or securities. Cash collateral is recognised/derecognised when received/paid. Collateral posted by the company in the form of securities is not derecognised from the balance sheet, whilst collateral received in the form of securities is not recognised in the balance sheet. If collateral received is subsequently sold, the obligation to return the collateral and the cash received are recognised on balance sheet.

Notes to the Financial Statements

Current and Deferred Taxation. The tax expense for the period consists of current and deferred taxation. Tax is recognised in the profit and loss account, except to the extent it relates to items recognised in other comprehensive income.

Current tax is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the company operates and generates taxable income. Deferred tax is recognised in respect of all temporary differences that have originated, but not reversed at the balance sheet date, where transactions or events have occurred at that date that will result in an obligation to pay more tax or a right to pay less tax in the future with the following exceptions:

- Deferred tax assets are recognised only to the extent that the directors consider that it is more likely than not that there will be suitable taxable profits from which the future reversal of the underlying temporary differences can be deducted.
- Deferred tax is measured on an undiscounted basis at the tax rates that are expected to apply in the periods in which temporary differences reverse, based on tax rates and laws enacted or substantively enacted at the balance sheet date.

Deferred tax is recognised in the profit and loss account or directly in other comprehensive income according to where the associated gain or loss, to which the deferred tax is attributable, is recognised.

Provisions, Contingent Liabilities and Contingent Assets. Provisions are recognised in the financial statements when it is probable that an outflow of economic benefits will be required to settle a present (legal or constructive) obligation, which has arisen as a result of past events, and for which a reliable estimate can be made of the amount of the obligation. Legal obligations that may arise as a result of proposed new laws are recognised as obligations only when the legislation is virtually certain to be enacted as drafted.

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the company or a present obligation that arises from past events but is not recognised because either an outflow of economic benefits is not probable or the amount of the obligation cannot be reliably measured.

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the company.

Contingent liabilities and contingent assets are not recognised in the financial statements. However, disclosure is made unless the probability of settlement is remote.

Note 3.

Critical Accounting Estimates and Judgements

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the amounts recognised in these financial statements. The nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements:

Fair Value Measurement

Certain of the company's financial assets and liabilities include significant unobservable inputs (i.e., level 3). See Note 28 for information about the carrying value, valuation techniques and significant inputs of these instruments.

Litigation and Regulatory Proceedings

The company estimates and provides for potential losses that may arise out of litigation and regulatory proceedings to the extent that such losses are probable and can be reasonably estimated. Significant judgement is required in making these estimates and the company's final liabilities may ultimately be materially different. See Note 20 for further information about the company's provisions for liabilities and Note 26 for legal proceedings that the company is involved in.

Defined Benefit Pension

The cost of the Plan and the value of the Plan liabilities are determined using actuarial valuations. This involves making assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, such estimates are subject to significant uncertainty. See Note 10 for further information about the company's Plan.

Notes to the Financial Statements

Note 4.

Net Revenues

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

- Gains and losses on financial assets and liabilities mandatorily measured at fair value through profit or loss (including financial liabilities held for trading) which primarily relate to non-interest gains and losses on financial instruments owned, financial instruments sold, but not yet purchased and certain collateralised agreements.
- Gains and losses on financial liabilities designated at fair value through profit or loss which primarily relate to non-interest gains and losses on certain other creditors and collateralised financings.
- Fees and commissions which primarily relates to net revenues from certain financial advisory and underwriting engagements, executing and clearing client transactions and certain investment management services.

The table below presents the company's net revenues.

\$ in millions	Period Ended November	
	2019	2018
Interest income		
Interest income from external counterparties	\$ 5,914	\$ 5,014
Interest income from parent and group undertakings	1,595	1,566
Total interest income	7,509	6,580
Interest expense		
Interest expense from external counterparties	(3,314)	(3,212)
Interest expense from parent and group undertakings	(4,391)	(3,563)
Total interest expense	(7,705)	(6,775)
Net interest expense	(196)	(195)
Financial assets and liabilities mandatorily measured at fair value through profit or loss	8,138	4,416
Financial assets and liabilities designated at fair value through profit or loss	(1,586)	1,875
Fees and commissions	1,740	1,770
Non-interest income	8,292	8,061
Net revenues	\$ 8,096	\$ 7,866

In the table above:

- Interest income included income from financial assets and liabilities measured at amortised cost of \$2.55 billion for the period ended November 2019 and \$2.41 billion for the period ended November 2018.
- Interest expense included expenses from financial assets and liabilities measured at amortised cost of \$3.40 billion for the period ended November 2019 and \$3.37 billion for the period ended November 2018.
- Financial liabilities designated at fair value through profit or loss are frequently economically hedged with financial assets and liabilities measured mandatorily at fair value through profit or loss. Accordingly, gains or losses that are reported in financial assets and liabilities designated at fair value through profit or loss can be partially offset by gains or losses reported in financial assets and liabilities measured mandatorily at fair value through profit or loss.

Notes to the Financial Statements

Note 5.

Segment Reporting

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

Basis of Preparation

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

The cost drivers of the company taken as a whole, compensation, headcount and levels of business activity, are broadly similar in each of the company’s business segments. Direct costs of employment in the company’s segments reflect, among other factors, the overall performance of the company as well as the performance of individual businesses. Consequently, operating profit margins in one segment of the company’s business may be significantly affected by the performance of the company’s other business segments.

The company allocates assets (including allocations of GCLA and cash, secured client financing and other assets), revenues and expenses among the four business segments. Due to the integrated nature of these segments, estimates and judgements are made in allocating certain assets, revenues and expenses.

The allocation process is based on the manner in which management currently views the performance of the segments. Transactions between segments are based on specific criteria or approximate third-party rates. Total administrative expenses include mark-to-market of share-based compensation that has not been allocated to individual business segments.

In addition to transactions entered into with third parties, the company also enters into transactions with affiliates in the normal course of business as part of market-making activities and general operations. Revenues are allocated to, and received from, such affiliates for these transactions.

Management believes that the information below provides a reasonable representation of each segment’s contribution to net revenues, operating profit and total assets. Operating profit has only been presented for the company’s significant segments, which are Investment Banking and Institutional Client Services.

The segment information presented in “Segment Net Revenues” and “Segment Operating Profit” below is prepared according to the following methodologies:

- Revenue and expenses directly associated with each segment are included in determining operating profit.
- Net revenues in the company’s segments include allocations of interest income and expense to specific securities and other positions in relation to the cash generated by, or funding requirements of, such positions with the exception of interest on long-term subordinated loans, which is presented in interest payable and similar expenses (see Note 9). Net interest is included in segment net revenues as it is consistent with how management assesses segment performance.
- Overhead expenses not directly allocable to specific segments are allocated ratably based on direct segment expenses.

Segment Net Revenues

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

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Investment Banking		
Financial advisory	\$ 742	\$ 693
Underwriting	775	871
Total Investment Banking	\$1,517	\$1,564
Institutional Client Services		
FICC Client Execution	\$2,768	\$2,353
Equities	2,739	2,640
Total Institutional Client Services	\$5,507	\$4,993
Investing & Lending	\$ 501	\$ 532
Investment Management	\$ 571	\$ 777
Total net revenues	\$8,096	\$7,866

The company updated its methodology for allocating funding costs, reported within net revenues, to its segments. As a result, in the table above, comparatives have been updated to conform to the current period presentation, with no impact to total net revenues.

Substantially all interest income and interest expense recognised in net revenues is attributable to Institutional Client Services.

Notes to the Financial Statements**Segment Operating Profit**

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

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Investment Banking		
Net revenues	\$ 1,517	\$ 1,564
Administrative expenses	(1,046)	(1,076)
Operating profit	\$ 471	\$ 488
Institutional Client Services		
Net revenues	\$ 5,507	\$ 4,993
Administrative expenses	(3,330)	(2,910)
Operating profit	\$ 2,177	\$ 2,083
Total net revenues	\$ 8,096	\$ 7,866
Total administrative expenses	(5,440)	(4,607)
Total operating profit	\$ 2,656	\$ 3,259

In the table above:

- Total net revenues included net revenues related to Investing & Lending and Investment Management segments of \$1.07 billion for the period ended November 2019 and \$1.31 billion for the period ended November 2018.
- Total administrative expenses included administrative expenses related to Investing & Lending and Investment Management segments of \$889 million for the period ended November 2019 and \$805 million for the period ended November 2018.
- Total administrative expenses included a charge of \$175 million for the period ended November 2019 and a credit of \$184 million for the period ended November 2018 representing mark-to-market of share-based compensation that has not been allocated to the company's segments.

Segment Assets

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

Geographic Information

Due to the highly integrated nature of international financial markets, the company manages its businesses based on the profitability of the enterprise as a whole. The methodology for allocating profitability to geographic regions is dependent on estimates and management judgement.

Geographic results are generally allocated as follows:

- Investment Banking: location of the client, investment banking team and underlying risk.
- Institutional Client Services: location of the market-making desk or the primary market for the underlying security.
- Investing & Lending: location of the investing and lending team.
- Investment Management: location of the investment management team.

The table below presents the total net revenues of the company by geographic region allocated based on the methodology referred to above.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
EMEA	\$5,768	\$5,674
Americas	1,460	1,352
Asia	868	840
Total net revenues	\$8,096	\$7,866

Notes to the Financial Statements

Note 6.

Administrative Expenses

The table below presents the company's administrative expenses.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Direct costs of employment	\$2,394	\$1,945
Brokerage, clearing, exchange and distribution fees	907	767
Market development	94	81
Communications and technology	122	112
Depreciation and amortisation	116	58
Occupancy	226	157
Professional fees	186	203
Management charges from group undertakings	919	802
Management charges to group undertakings	(370)	(387)
Other expenses	846	869
Total administrative expenses	\$5,440	\$4,607

In the table above:

- Occupancy expenses included net operating lease rentals for land and buildings of \$76 million for the period ended November 2019 and \$69 million for the period ended November 2018.
- Other expenses primarily includes expenses incurred to satisfy performance obligations where the company is principal to a transaction as required by IFRS 15, miscellaneous taxes, provisions for liabilities and charitable contributions.
- Management charges includes service charges relating to operational and administrative support and management services, received from and provided to group undertakings.

The table below presents the fees payable to the company's auditor, which are included in professional fees.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Fees for the company's audit	\$ 6.0	\$ 6.1
Audit related assurance services	4.1	4.2
Other assurance services	1.1	1.5
Taxation compliance services	0.2	0.1
Other non-audit services	0.1	0.1
Total fees for non-audit services	5.5	5.9
Total	\$11.5	\$12.0

In the table above:

- Audit related assurance services included fees in connection with the audit of the company's financial information and reporting to GS Group's auditor for the purposes of GS Group's audit.
- Other assurance services included the company's share of fees related to certain services provided by a network firm of the company's auditor to various GS Group entities. These fees were apportioned to the various GS Group entities, including the company, by reference to each entity's asset size.

Note 7.

Staff Costs

The table below presents the company's average monthly employee headcount, including directors.

<i>Number</i>	Average for the	
	Period Ended November	
	2019	2018
Investment Banking	819	782
Institutional Client Services	1,649	1,571
Investing & Lending	205	198
Investment Management	581	555
Support Functions	924	961
Total average headcount	4,178	4,067

Total headcount was 4,230 as of November 2019 and 4,210 as of November 2018.

The table below presents employment costs incurred by the company, including those relating to directors.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Wages and salaries	\$2,075	\$1,659
Social security costs	268	237
Pension costs:		
Defined contribution plan and defined contribution section of the hybrid pension plan	51	45
Defined benefit section of the hybrid pension plan	–	4
Total direct costs of employment	\$2,394	\$1,945

In the table above, total direct costs of employment included a charge of \$175 million for the period ended November 2019 and a credit of \$184 million for the period ended November 2018 relating to the mark-to-market of share-based compensation.

Notes to the Financial Statements**Note 8.****Directors' Emoluments**

The table below presents the company's directors' emoluments.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Aggregate emoluments	\$7	\$5
Company pension contributions to money purchase schemes	-	-
Total directors' emoluments	\$7	\$5

The table below presents emoluments for the highest paid director.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Aggregate emoluments	\$4	\$3
Company pension contributions to money purchase schemes	-	-
Accrued annual pension at end of the period	-	-

In accordance with the Companies Act 2006, directors' emoluments above represent the proportion of total emoluments paid or payable in respect of qualifying services only. This total only includes the value of cash and benefits in kind, and does not include the value of equity awards in accordance with the provisions of Schedule 5 of SI 2008/410. Directors also receive emoluments for non-qualifying services which are not required to be disclosed.

Three directors were members of a defined contribution scheme. Three directors, including the highest paid director, have received or are due to receive Group Inc. shares in respect of long-term incentive schemes during the period. No director has exercised stock options during the period.

The aggregate emoluments of the seven non-executive directors who were members of the board of directors for all or part of the period ended November 2019 was approximately \$1.8 million. Certain non-executive directors received or will receive additional ongoing fees in respect of advisory services provided during the period ended November 2019, the aggregate amount of which is approximately \$2.3 million.

Note 9.**Interest Payable and Similar Expenses**

Interest payable and similar expenses consists of interest on long-term subordinated loans from parent and group undertakings of \$243 million for the period ended November 2019 and \$237 million for the period ended November 2018. See Note 19 for further details.

Note 10.**Pension Arrangements**

The company sponsors a pension plan with a hybrid structure, having both a defined benefit section (the Plan) and a defined contribution section. The Plan provides retirement benefits on the basis of members' final salary, with a normal retirement age of 65 for most members. The Plan is funded, with the assets of the scheme held separately from those of the company, in separate trustee-administered funds.

The Plan was closed to new entrants with effect from April 1, 2008, and was replaced by a defined contribution plan. As of March 31, 2016, the Plan was closed to future benefit accruals for existing participants.

The Plan operates under trust law and is managed and administrated by the Goldman Sachs UK Retirement Plan Trustee Limited (the Trustee) on behalf of the members in accordance with the terms of the Trust Deed and Rules and relevant legislation. The Plan's assets are held by the trust.

A full actuarial valuation of the Plan was carried out by a qualified independent actuary as of July 31, 2019 using the projected unit credit method and updated to November 30, 2019. As of November 2019, the Plan liabilities consist of 96% in respect of future beneficiaries and 4% in respect of current beneficiaries.

Risks of the Plan

The main risks of the Plan are:

- **Funding Shortfall.** Additional contributions will be required if the investment returns are not sufficient to pay for benefits. The level of equity returns will be a key determinant of overall investment return; the investment portfolio is also subject to a range of other risks typical of the asset classes held, in particular interest rate risk and inflation risk on bonds.
- **Asset Volatility.** A consequence of the Plan's investment strategy, with a significant proportion of the assets invested in equities and other return-seeking assets is that the difference between Plan assets and Plan liabilities may be volatile.
- **Plan Liabilities Sensitivity.** Plan liabilities are sensitive to the assumptions made about future inflation and life expectancy. It is also sensitive to the discount rate, which depends on market yields on sterling-denominated AA corporate bonds.

Notes to the Financial Statements

Financial Assumptions

The table below presents the significant financial assumptions used to determine the present value of the defined benefit obligation.

% per annum	Period Ended November	
	2019	2018
Discount rate	1.99	3.14
Rate of price inflation – RPI	3.02	3.50
Rate of price inflation – CPI	2.27	2.50
Rate of increase in pensions in payments (post-November 30, 1996 accrual)	2.82	3.30
Rate of increase in pensions in deferment (post-November 30, 1996 accrual)	2.27	2.50
Rate of increase in pensions in deferment (post-April 5, 2009 accrual)	2.27	2.50

Mortality Assumptions

The table below presents the mortality assumptions used to determine the present value of the defined benefit obligation.

Years	Period Ended November	
	2019	2018
Life expectancy at 65 for a member currently 65		
Males	24.1	23.5
Females	25.3	24.7
Life expectancy at 65 for a member currently 45		
Males	25.3	24.8
Females	26.6	26.2

In the table above, the mortality assumptions adopted for the period ended November 2019 were the “SAPS S3 very light (All Pensioners) series” base table with an allowance for future improvements from 2013 onwards in line with the CMI 2018 core projections with a long-term rate of improvement of 1.25% per annum and an initial addition to mortality improvement parameter of 0.50% per annum.

Defined Benefit Cost

The table below presents the defined benefit gain related to the Plan recognised in the company’s profit and loss account and in other comprehensive income.

\$ in millions	Period Ended November	
	2019	2018
Profit and loss account		
Past service cost	\$ –	\$ 4
Net finance income	(13)	(8)
Total credited to the profit and loss account	(13)	(4)
Other comprehensive income		
Return on Plan assets less/(greater) than discount rate	(393)	368
Actuarial gain – liability experience	(21)	(7)
Actuarial loss/(gain) – financial assumptions	560	(408)
Actuarial loss/(gain) – demographic assumptions	13	(14)
Total loss/(gain) recognised in other comprehensive income	159	(61)
Total defined benefit loss/(gain)	\$ 146	\$ (65)

Reconciliation of Pension Surplus

The table below presents a reconciliation of Plan assets, Plan liabilities and the net pension surplus.

\$ in millions	Plan assets	Plan liabilities	Net pension surplus
Period Ended November 2019			
As of December 1	\$2,222	\$(1,816)	\$ 406
Past service cost	–	–	–
Net finance income	69	(56)	13
Return on Plan assets greater/(less) than discount rate	393	–	393
Actuarial gain/(loss) – liability experience	–	21	21
Actuarial gain/(loss) – financial assumptions	–	(560)	(560)
Actuarial gain/(loss) – demographic assumptions	–	(13)	(13)
Employer contributions	–	–	–
Benefits paid	(44)	44	–
Foreign exchange gain/(loss)	42	(38)	4
As of November 30	\$2,682	\$(2,418)	\$ 264
Period Ended November 2018			
As of January 1	\$2,663	\$(2,342)	\$ 321
Past service cost	–	(4)	(4)
Net finance income	58	(50)	8
Return on Plan assets greater/(less) than discount rate	(368)	–	(368)
Actuarial gain/(loss) – liability experience	–	7	7
Actuarial gain/(loss) – financial assumptions	–	408	408
Actuarial gain/(loss) – demographic assumptions	–	14	14
Employer contributions	47	–	47
Benefits paid	(34)	34	–
Foreign exchange gain/(loss)	(144)	117	(27)
As of November 30	\$2,222	\$(1,816)	\$ 406

Notes to the Financial Statements

Fair Value of Plan Assets

The Plan Trustees have a long-term asset allocation strategy to invest 50% of assets in return seeking investments (such as equities) and 50% in liability matching assets (such as Gilts). The Plan has a hedging programme investing in swaps and other derivatives in order to reduce the exposure to changes in interest rates and inflation.

The table below presents the fair value of Plan assets.

<i>\$ in millions</i>	Quoted	Unquoted	Total
As of November 2019			
Equities	\$1,400	\$ –	\$1,400
Gilts	351	–	351
Swaps	–	665	665
Cash and cash equivalents	177	–	177
Other	–	89	89
Total	\$1,928	\$754	\$2,682
As of November 2018			
Equities	\$1,126	\$ –	\$1,126
Gilts	497	–	497
Swaps	–	395	395
Cash and cash equivalents	108	–	108
Other	–	96	96
Total	\$1,731	\$491	\$2,222

Sensitivity Analysis

The table below presents a sensitivity analysis of Plan liabilities for each significant actuarial assumption.

	Impact to Plan Liabilities			
	Increase in assumption		Decrease in assumption	
	<i>\$ in millions</i>	%	<i>\$ in millions</i>	%
As of November 2019				
0.25% change in discount rate	\$ (189)	(7.8)	\$ 206	8.5
0.25% change in price inflation	184	7.6	(173)	(7.2)
1 year change in life expectancy	89	3.7	(89)	(3.7)
As of November 2018				
0.25% change in discount rate	\$ (138)	(7.6)	\$ 151	8.3
0.25% change in price inflation	109	6.0	(127)	(7.0)
1 year change in life expectancy	75	4.1	(75)	(4.1)

In the table above, the sensitivities are based on a change in each assumption while holding all other assumptions constant.

There are inherent limitations in the sensitivity analysis, as such idiosyncratic movements are unlikely to occur. The methodology used to calculate the sensitivities are consistent across the two periods presented in the table above.

Nature of Future Cash Flows

Since the Plan's closure to future accruals from March 31, 2016, the company has ceased to make regular contributions into the Plan but will continue to assess the funding requirements of the Plan with the Trustees on a periodic basis.

On a triennial basis, a formal funding valuation of the Plan is performed for the Trustees to assess the funding needs of the Plan. This valuation differs from the actuarial valuation required for accounting purposes due to the use of different assumptions.

The most recent funding valuation of the Plan was performed by a qualified independent actuary as of December 31, 2018, which indicated that the Plan was in a funding surplus of \$287 million. As such, the company currently does not expect to make any further contributions into the Plan.

The company expects \$20 million of benefits to be paid out of the Plan to members in the twelve months following November 2019.

The weighted average duration of Plan liabilities was 33 years as of November 2019.

Note 11.

Share-Based Payments

Stock Incentive Plan

Group Inc. sponsors a stock incentive plan, The Goldman Sachs Amended and Restated Stock Incentive Plan (2018) (2018 SIP), which provides for, amongst others, grants of RSUs, restricted stock, dividend equivalent rights and incentive stock options. On May 2, 2018, Group Inc.'s shareholders approved the 2018 SIP. The 2018 SIP replaced The Goldman Sachs Amended and Restated Stock Incentive Plan (2015) previously in effect, and applies to awards granted on or after the date of approval.

The company recorded share-based compensation in respect of the amortisation of granted equity awards, net of forfeitures, of \$452 million for the period ended November 2019 and \$405 million for the period ended November 2018. The corresponding credit to equity has been transferred to liabilities as a result of the terms of the chargeback agreement with Group Inc. under which the company is committed to pay to Group Inc. the grant-date fair value as well as subsequent movements in the fair value of those awards to Group Inc. at the time of delivery to its employees.

Notes to the Financial Statements

Restricted Stock Units

Group Inc. grants RSUs to the company's employees under the 2018 SIP, which are generally valued based on the closing price of the underlying shares on the date of grant after taking into account a liquidity discount for any applicable post-vesting and delivery transfer restrictions. RSUs generally vest and underlying shares of common stock deliver (net of required withholding tax) as outlined in the applicable award agreements. Employee award agreements generally provide that vesting is accelerated in certain circumstances, such as on retirement, death, disability and conflicted employment. Delivery of the underlying shares of common stock is conditioned on the grantees satisfying certain vesting and other requirements outlined in the award agreements.

Stock Options

Stock options generally vest as outlined in the applicable stock option agreement. In general, options expire on the tenth anniversary of the grant date, although they may be subject to earlier termination or cancellation under certain circumstances in accordance with the terms of the applicable stock option agreement and The Goldman Sachs Amended and Restated Stock Incentive Plan in effect at the time of grant.

The table below presents options outstanding. There were no options outstanding as of November 2019. All outstanding options as of November 2018 were granted in 2008.

Exercise Price	Options outstanding	Weighted average exercise price	Weighted average remaining life (years)
As of November 2018			
\$ 75.00 - \$ 89.99	249,813	\$78.78	0.08
Total outstanding	249,813	\$78.78	0.08

For those options exercised during the period, the weighted average share price at the date of exercise was \$171.32 for the period ended November 2019 and \$253.52 for the period ended November 2018.

Note 12.

Tax on Profit

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

\$ in millions	Period Ended November	
	2019	2018
Current tax		
U.K. taxation	\$360	\$430
Adjustments in respect of prior periods	5	37
Overseas taxation	246	182
Total current tax	611	649
Deferred tax		
Origination and reversal of temporary differences	13	180
Adjustments in respect of prior periods	-	3
Total deferred tax	13	183
Total tax on profit	\$624	\$832

The table below presents a reconciliation between tax on profit and the amount calculated by applying the weighted average rate of U.K. corporation tax applicable to the company for the period ended November 2019 of 27.0% (period ended November 2018: 27.0%) to the profit before taxation.

\$ in millions	Period Ended November	
	2019	2018
Profit before taxation	\$2,426	\$3,030
Profit multiplied by U.K. corporation tax rate of 27.0% (period ended November 2018: 27.0%)	655	818
Changes in recognition and measurement of deferred tax assets	15	6
Permanent differences	(10)	(32)
Tax losses surrendered from group undertakings for nil consideration	(40)	-
Effect of higher taxes on overseas earnings	3	4
Exchange differences and other	(4)	(4)
Adjustments in respect of prior periods	5	40
Total tax on profit	\$ 624	\$ 832

The U.K. government announced in its budget on March 11, 2020 that the U.K. corporation tax main rate, which was due to decrease from 19.0% to 17.0% from April 1, 2020, will now remain at 19.0%. This will result in the U.K. corporation tax rate applicable to the company remaining at 27.0% from April 1, 2020. If this rate change were to have been substantively enacted as of November 2019, then the company's deferred tax asset would have been higher by \$22 million, of which \$19 million would have been recognised in the profit and loss account and \$3 million in other comprehensive income.

Notes to the Financial Statements

Note 13.

Fixed Assets

The table below presents fixed assets.

\$ in millions	As of November	
	2019	2018
Tangible fixed assets	\$ 13	\$ 20
Intangible fixed assets	392	294
Fixed asset investments	4	1
Total fixed assets	\$409	\$315

Tangible Fixed Assets

The table below presents the movements in tangible fixed assets during the period.

\$ in millions	Leasehold improvements	Fixtures, fittings and equipment	Total
Cost			
As of December 1	\$ 51	\$10	\$ 61
Additions	9	–	9
Disposals	(31)	(1)	(32)
As of November 30	29	9	38
Accumulated depreciation			
As of December 1	35	6	41
Charge for the period (see Note 6)	7	–	7
Disposals	(22)	(1)	(23)
As of November 30	20	5	25
Net book value			
As of November 2019	\$ 9	\$ 4	\$ 13
As of November 2018	\$ 16	\$ 4	\$ 20

Intangible Fixed Assets

The table below presents the movements in intangible fixed assets during the period.

\$ in millions	Computer software	Assets in the course of construction	Total
Cost			
As of December 1	\$191	\$183	\$374
Additions/Transfers	200	11	211
Disposals	(10)	–	(10)
As of November 30	381	194	575
Accumulated amortisation			
As of December 1	80	–	80
Charge for the period (see Note 6)	109	–	109
Disposals	(6)	–	(6)
As of November 30	183	–	183
Net book value			
As of November 2019	\$198	\$194	\$392
As of November 2018	\$111	\$183	\$294

Fixed Asset Investments

Fixed asset investments included investments other than loans of \$4 million as of November 2019 and \$1 million as of November 2018 and shares in subsidiary undertakings of \$nil as of both November 2019 and November 2018.

The table below presents the subsidiary over which the company exercised control as of November 2019.

Name of company	Country of incorporation	Holding and proportion of voting rights	Class of shares held	Number held	Nature of business
Goldman Sachs (Cayman) Limited	Cayman Islands	100%	Ordinary shares	250	Financial services

The registered office address of Goldman Sachs (Cayman) Limited is the offices of Maples Corporate Services Limited, PO Box 309, Uglund House, Grand Cayman, KY1-1104, Cayman Islands.

The company has interests in a number of special purpose entities and capital guaranteed funds which do not meet the definition of a legal subsidiary, but give rise to the risks and rewards that are, in substance, no different than if they were legal subsidiaries. The activities of these special purpose entities and capital guaranteed funds consist of the issuance of loan notes under the terms of a repackaging programme. These special purposes entities and capital guaranteed funds are consolidated in the financial statements of Group Inc.

Notes to the Financial Statements

Note 14.

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

Financial instruments owned and financial instruments sold, but not yet purchased consist of financial instruments and investments within the operating activities of the company. Financial instruments owned includes financial instruments owned pledged as collateral. See Note 28 for further information.

The table below presents financial instruments owned.

<i>\$ in millions</i>	As of November	
	2019	2018
Cash instruments		
Money market instruments	\$ 672	\$ 428
Government and agency obligations	39,561	33,516
Mortgage and other asset-backed loans and securities	234	485
Corporate debt instruments	21,389	17,514
Equity securities	45,101	29,535
Commodities	25	88
Total cash instruments	106,982	81,566
Derivative instruments		
Interest rates	491,471	294,986
Credit	33,564	28,463
Currencies	89,323	111,791
Commodities	8,054	12,644
Equities	59,013	64,679
Total derivative instruments	681,425	512,563
Total financial instruments owned	\$788,407	\$594,129

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

<i>\$ in millions</i>	As of November	
	2019	2018
Cash instruments		
Government and agency obligations	\$ 16,955	\$ 21,700
Corporate debt instruments	3,883	3,545
Equity securities	23,292	22,353
Commodities	20	2
Total cash instruments	44,150	47,600
Derivative instruments		
Interest rates	481,797	287,789
Credit	31,371	26,080
Currencies	91,522	111,863
Commodities	7,853	12,758
Equities	57,947	59,897
Total derivative instruments	670,490	498,387
Total financial instruments sold, but not yet purchased	\$714,640	\$545,987

In the tables above:

- Corporate debt instruments includes corporate loans, debt securities, convertible debentures and other debt obligations.
- Equity securities includes public and private equities and exchange-traded funds.
- Convertible debentures previously included within equity securities have been reclassified to corporate debt instruments. Comparatives have been updated to conform to the current period presentation.

Note 15.

Collateralised Agreements

The table below presents collateralised agreements.

<i>\$ in millions</i>	As of November	
	2019	2018
Resale agreements	\$ 72,770	\$127,474
Securities borrowed	83,578	75,860
Total collateralised agreements	\$156,348	\$203,334

In the table above:

- Total collateralised agreements included amounts due from group undertakings of \$88.43 billion as of November 2019 and \$129.75 billion as of November 2018.
- Total collateralised agreements included balances due in more than one year of \$1.72 billion as of November 2019 and \$1.16 billion as of November 2018.

Notes to the Financial Statements**Note 16.****Debtors**

The table below presents debtors balances.

<i>\$ in millions</i>	As of November	
	2019	2018
Amounts due from broker/dealers and customers	\$59,102	\$52,084
Amounts due from parent and group undertakings	14,142	12,391
Deferred tax (see Note 17)	333	256
Other debtors	88	29
Prepayments and accrued income	28	33
Total debtors	\$73,693	\$64,793

In the table above:

- Amounts due from parent and group undertakings included balances due in more than one year relating to intercompany loans of \$527 million as of November 2019 and \$134 million as of November 2018. All other debtors are due within one year of the balance sheet date.
- Amounts due from broker/dealers and customers and amounts due from parent and group undertakings included receivables from contracts with clients of \$203 million as of November 2019 and \$338 million as of November 2018.
- Total debtors included financial assets of \$73.26 billion as of November 2019 and \$64.49 billion as of November 2018, and non-financial assets of \$437 million as of November 2019 and \$306 million as of November 2018.

Note 17.**Deferred Tax**

The table below presents the components of the company's deferred tax asset.

<i>\$ in millions</i>	As of November	
	2019	2018
Deferred compensation	\$453	\$431
Post-retirement benefits	(63)	(95)
Temporary differences related to fixed assets	(93)	(68)
Debt valuation adjustment	38	(12)
Other temporary differences	(2)	–
Total deferred tax	\$333	\$256

The table below presents changes in each component of the company's deferred tax asset.

<i>\$ in millions</i>	As of November	
	2019	2018
Deferred compensation		
Beginning balance	\$431	\$ 577
Transfer to the profit and loss account	22	(146)
Ending balance	\$453	\$ 431
Post-retirement benefits		
Beginning balance	\$ (95)	\$ (72)
Transfer to the profit and loss account	(8)	(9)
Transfer to other comprehensive income	40	(14)
Ending balance	\$ (63)	\$ (95)
Temporary differences related to fixed assets		
Beginning balance	\$ (68)	\$ (41)
Transfer to the profit and loss account	(25)	(27)
Ending balance	\$ (93)	\$ (68)
Debt valuation adjustment		
Beginning balance	\$ (12)	\$ 111
Transfer to other comprehensive income	50	(123)
Ending balance	\$ 38	\$ (12)
Other temporary differences		
Beginning balance	\$ –	\$ –
IFRS 15 transition adjustment	–	1
Transfer to the profit and loss account	(2)	(1)
Ending balance	\$ (2)	\$ –
Total		
Beginning balance	\$256	\$ 575
IFRS 15 transition adjustment	–	1
Transfer to the profit and loss account (see Note 12)	(13)	(183)
Transfer to other comprehensive income	90	(137)
Ending balance	\$333	\$ 256

In the tables above, deferred compensation is mainly in respect of share-based compensation.

Notes to the Financial Statements

Note 18.

Collateralised Financings

The table below presents collateralised financings.

\$ in millions	As of November	
	2019	2018
Amounts falling due within one year		
Repurchase agreements	\$ 50,988	\$ 79,521
Securities loaned	66,373	56,122
Intercompany loans	722	–
Debt securities issued	3,420	2,672
Other borrowings	3,237	3,525
Total	\$124,740	\$141,840
Amounts falling due after more than one year		
Repurchase agreements	\$ 2,146	\$ 5,709
Securities loaned	–	227
Debt securities issued	47	261
Other borrowings	3,154	4,108
Total	\$ 5,347	\$ 10,305
Total collateralised financings	\$130,087	\$152,145

In the table above:

- Repurchase agreements falling due after more than one year included instruments that are repayable in more than five years of \$77 million as of November 2019 and \$74 million as of November 2018 which had maturities falling due in 2030.
- Debt securities issued and other borrowings falling due after more than one year included instruments that are repayable in more than five years of \$1.66 billion as of November 2019 and \$2.21 billion as of November 2018. As of November 2019, these instruments had maturities falling due between 2025 and 2050. Payments on these instruments are typically referenced to underlying financial assets, which are predominately credit, interest rates and equities-related.
- Total collateralised financings included amounts due to group undertakings of \$87.08 billion as of November 2019 and \$98.80 billion as of November 2018 of which \$85.99 billion as of November 2019 and \$95.90 billion as of November 2018 are due within one year.
- Intercompany loans, debt securities issued and other borrowings are secured by securities which have been pledged as collateral. This pledged collateral is either recognised within “Financial instruments owned” or sourced through collateralised agreements.

Note 19.

Other Creditors

The table below presents other creditors.

\$ in millions	As of November	
	2019	2018
Amounts falling due within one year		
Unsecured borrowings	\$ 19,193	\$ 29,229
Amounts due to broker/dealers and customers	62,254	53,647
Amounts due to parent and group undertakings:		
Other unsecured creditors	10,274	12,465
Share-based compensation	404	418
Corporation tax payable	42	127
Other taxes and social security costs	305	338
Other creditors and accruals	1,004	927
Total	\$ 93,476	\$ 97,151
Amounts falling due after more than one year		
Unsecured borrowings	\$ 68,257	\$ 57,461
Amounts due to parent and group undertakings:		
Share-based compensation	719	575
Other creditors and accruals	90	59
Total	\$ 69,066	\$ 58,095
Total other creditors	\$162,542	\$155,246

In the table above:

- Amounts falling due within one year included financial liabilities of \$93.13 billion as of November 2019 and \$96.69 billion as of November 2018 and non-financial liabilities of \$347 million as of November 2019 and \$465 million as of November 2018.
- All amounts falling due after more than one year are financial liabilities as of both November 2019 and November 2018.

Notes to the Financial Statements

Unsecured Borrowings

The table below presents unsecured borrowings.

\$ in millions	As of November	
	2019	2018
Intercompany		
Loans	\$10,493	\$21,232
Other borrowings	1,054	892
Amounts falling due within one year	11,547	22,124
Loans	46,021	32,453
Subordinated loans	5,377	5,377
Other borrowings	1,366	1,539
Amounts falling due after more than one year	52,764	39,369
Total intercompany unsecured borrowings	\$64,311	\$61,493
External		
Bank loans	\$ 66	\$ 164
Overdrafts	38	153
Debt securities issued	7,127	6,483
Other borrowings	415	305
Amounts falling due within one year	7,646	7,105
Bank loans	20	6
Debt securities issued	15,258	17,854
Other borrowings	215	232
Amounts falling due after more than one year	15,493	18,092
Total external unsecured borrowings	\$23,139	\$25,197
Total unsecured borrowings	\$87,450	\$86,690

In the table above:

- Debt securities issued and other borrowings falling due after more than one year included instruments that are repayable in more than five years of \$9.63 billion as of November 2019 and \$10.97 billion as of November 2018. As of November 2019, these instruments had maturities falling due between 2024 and 2057. Payments on these instruments are typically referenced to underlying financial assets, which are predominately interest rates, equities and currencies-related.
- Intercompany loans falling due after more than one year included loans that are repayable in more than five years. As of November 2019, the company had variable rate loans of \$833 million with maturities falling due between December 1, 2024 and April 7, 2028. As of November 2018, the company had variable rate loans of \$1.03 billion with maturities falling due between April 8, 2024 and April 7, 2028.
- Subordinated loans of \$5.38 billion as of both November 2019 and November 2018 consist of long-term loans from parent and group undertakings, which are unsecured and carry interest at a margin over the U.S. Federal Reserve's Federal Funds rate. The margin is reset on a periodic basis to reflect changes in GS Group's weighted average cost of debt. These loans constitute regulatory capital as approved by the PRA, subject to any regulatory capital deductions, and are repayable subject to PRA approval. These loans are repayable between December 26, 2024 and September 9, 2025.

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 DVA gains/(losses) included in accumulated other comprehensive income.

\$ in millions	As of November	
	2019	2018
DVA (pre-tax)	\$(147)	\$54

Cash Flows from Financing Activities

In the "Statements of Cash Flows", cash flows from financing activities includes cash flows associated with the company's long-term subordinated loans and associated accrued interest. Accrued interest on the company's long-term subordinated loans, which is included in other creditors, decreased by \$46 million for the period ended November 2019, due to payments of \$289 million, partially offset by interest accrued of \$243 million. Accrued interest on the company's long-term subordinated loans, which is included in other creditors, increased by \$183 million for the period ended November 2018, due to interest accrued of \$237 million, partially offset by payments of \$54 million.

Note 20.

Provisions for Liabilities

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

\$ in millions	
As of December 1, 2018	\$ 78
Charged during the period	3
Reduction in provision	(24)
Utilised during the period	(56)
As of November 30, 2019	\$ 1

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

Notes to the Financial Statements**Note 21.****Share Capital**

The table below presents share capital.

Allotted, called up and fully paid	Ordinary shares	
	of \$1 each	\$ in millions
As of December 1, 2018	581,964,161	\$582
Allotted during the period	7,643,885	8
As of November 30, 2019	589,608,046	\$590

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

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

Note 22.**Other Equity Instruments**

The table below presents information about the company's unsecured AT1 notes.

Month of issuance	Number of AT1 notes	\$ millions	Interest rate
November 2018	2,500	2,500	8.67% p.a.
As of November 30, 2019	8,300	\$8,300	

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%.

The table below presents information about interest paid on the AT1 notes. Interest paid, net of tax is recognised in shareholder's funds. The non-cumulative fixed interest is payable at the company's discretion subject to certain solvency and regulatory conditions.

\$ millions	Period Ended November	
	2019	2018
Interest paid (pre-tax)	\$742	\$503
Interest paid (net of tax)	\$542	\$367

Note 23.**Dividends**

The directors declared and paid an interim dividend of \$1.00 billion on November 26, 2019 to GSG UK representing \$1.70 per share.

The directors declared and paid an interim dividend of \$2.50 billion on November 30, 2018 to GSG UK representing \$4.30 per share.

Note 24.**Cash and Cash Equivalents**

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

\$ in millions	As of November	
	2019	2018
Cash at bank and in hand	\$22,397	\$24,396
Overdrafts (see Note 19)	(38)	(153)
Total cash and cash equivalents	\$22,359	\$24,243

In the table above, cash at bank and in hand included cash that is not available for use by the company of \$4.22 billion as of November 2019 and \$3.44 billion as of November 2018.

Notes to the Financial Statements

Note 25.

Reconciliation of Cash Flows From Operating Activities

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

\$ in millions	Period Ended November	
	2019	2018
Profit before taxation	\$ 2,426	\$ 3,030
Adjustments for		
Depreciation and amortisation (see Notes 6 and 13)	116	58
Loss on disposal of fixed assets	6	9
Credit for defined benefit plan (see Note 10)	(13)	(4)
Foreign exchange losses	328	1,432
Share-based compensation expense	601	249
IFRS 15 transition adjustment	–	(7)
Provisions for liabilities	(21)	68
Interest payable and similar expenses (see Note 9)	243	237
Cash generated before changes in operating assets and liabilities	3,686	5,072
Changes in operating assets		
Decrease/(increase) in financial instruments owned	(194,278)	46,135
Decrease in collateralised agreements	46,986	1,486
Decrease/(increase) in debtors	(8,816)	8,944
Changes in operating assets	(156,108)	56,565
Changes in operating liabilities		
Increase/(decrease) in financial instruments sold, but not yet purchased	168,653	(43,935)
Decrease in collateralised financings	(22,058)	(23,302)
Increase in other creditors	6,393	11,627
Decrease in provision for liabilities	(56)	–
Changes in operating liabilities	152,932	(55,610)
Contributions paid to defined benefit plan (see Note 10)	–	(47)
Cash generated from operations	\$ 510	\$ 5,980

In the table above, cash generated from operations included interest paid of \$7.02 billion for the period ended November 2019 and \$6.76 billion for the period ended November 2018, and interest received of \$7.60 billion for the period ended November 2019 and \$6.36 billion for the period ended November 2018.

Note 26.

Financial Commitments and Contingencies

Commitments and Contingencies

The table below presents commitments and contingencies.

\$ in millions	As of November	
	2019	2018
Collateralised agreement	\$63,292	\$60,530
Collateralised financing	28,006	27,155
Other	2,906	2,400
Total	\$94,204	\$90,085

Commitments and contingencies included balances with group undertakings of \$41.73 billion as of November 2019 and \$23.13 billion as of November 2018.

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

Other commitments primarily relate to collateral commitments.

In addition, there are registered charges on the company's assets which have arisen in the ordinary course of business.

Leases

The company leases certain buildings under non-cancellable lease agreements. Under these lease agreements, which are subject to renegotiation at various intervals specified in the leases, the company pays all insurance, maintenance and repairs of these properties.

The table below presents total future minimum rental payments under non-cancellable operating leases for each of the following periods.

\$ in millions	As of November	
	2019	2018
Less than one year	\$18	\$ 82
Between one and five years	24	113
Over five years	4	6
Total	\$46	\$201

Total future minimum sublease payments expected to be received under non-cancellable subleases were \$9 million as of November 2019 and \$21 million as of November 2018.

Notes to the Financial Statements

Legal Proceedings

The company is involved in a number of judicial, regulatory and arbitration proceedings (including those described below) concerning matters arising in connection with the conduct of the company's business, however it is not practicable to reliably estimate the financial impact, if any, of these proceedings on the company, except as disclosed in Note 20.

1Malaysia Development Berhad (1MDB)-Related Matters. GS Group has received subpoenas and requests for documents and information from various governmental and regulatory bodies and self-regulatory organisations as part of investigations and reviews relating to financing transactions and other matters involving 1MDB, a sovereign wealth fund in Malaysia. Subsidiaries of Group Inc., including the company, acted as arrangers or purchasers of approximately \$6.5 billion of debt securities of 1MDB.

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

On February 4, 2020, the FRB disclosed that Andrea Vella, a former participating managing director of GS Group whom the DOJ had previously referred to as an unindicted co-conspirator, had agreed, without admitting or denying the FRB's allegations, to a consent order that prohibited him from participating in the banking industry. No other penalties were imposed by the consent order.

On December 17, 2018, the Attorney General of Malaysia filed criminal charges in Malaysia against the company, as the arranger of three offerings of debt securities of 1MDB, aggregating approximately \$6.5 billion in principal amount, for alleged disclosure deficiencies in the offering documents relating to, among other things, the use of proceeds for the debt securities, as well as against two other subsidiaries of Group Inc. Criminal charges have also been filed against Leissner, Low, Ng and Jasmine Loo Ai Swan. In a related press release, the Attorney General of Malaysia indicated that prosecutors in Malaysia will seek criminal fines against the accused in excess of \$2.7 billion plus the \$600 million of fees received in connection with the debt offerings. On August 9, 2019, the Attorney General of Malaysia announced that criminal charges had also been filed against five current and former directors of the company, including the company's chief executive officer, and twelve current and former directors of the two other subsidiaries.

The Malaysia Securities Commission issued notices to show cause against a subsidiary of Group Inc. in December 2018 and March 2019 that (i) allege possible violations of Malaysian securities laws and (ii) indicate that the Malaysia Securities Commission is considering whether to revoke the subsidiary's licence to conduct corporate finance and fund management activities in Malaysia.

GS Group has received multiple demands, beginning in November 2018, from alleged shareholders under Section 220 of the Delaware General Corporation Law for books and records relating to, among other things, GS Group's involvement with 1MDB and its compliance procedures. On December 13, 2019, an alleged shareholder of Group Inc. filed a lawsuit in the Court of Chancery of the State of Delaware seeking books and records relating to, among other things, GS Group's involvement with 1MDB and its compliance procedures.

Notes to the Financial Statements

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

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

On November 21, 2018, a summons with notice was filed in New York Supreme Court, County of New York, by International Petroleum Investment Company, which guaranteed certain debt securities issued by 1MDB, and its subsidiary Aabar Investments PJS. The summons with notice makes unspecified claims relating to 1MDB and seeks unspecified compensatory and punitive damages and other relief against Group Inc. and a number of Group Inc.'s subsidiaries, including the company, Leissner, Ng, and Vella, as well as individuals (who are not current or former employees of GS Group) previously associated with the plaintiffs.

On December 20, 2018, a putative securities class action lawsuit was filed in the U.S. District Court for the Southern District of New York against Group Inc. and certain former officers of GS Group alleging violations of the anti-fraud provisions of the Exchange Act with respect to Group Inc.'s disclosures concerning 1MDB and seeking unspecified damages. The plaintiffs filed the second amended complaint on October 28, 2019, which the defendants moved to dismiss on January 9, 2020.

GS Group is cooperating with the DOJ and all other governmental and regulatory investigations relating to 1MDB. GS Group is also engaged in discussions with certain governmental and regulatory authorities with respect to potential resolution of their investigations and proceedings. There can be no assurance that the discussions will lead to resolution of any of those matters. Any such resolution, as well as proceedings by the DOJ or other governmental or regulatory authorities could result in the imposition of significant fines, penalties and other sanctions against GS Group, including restrictions on GS Group's activities. Any such losses, which have been reserved for by the ultimate parent undertaking, Group Inc., are expected to be borne by Group Inc. With regard to any other legal or regulatory proceedings against the company related to 1MDB, it is not practicable to reliably estimate the financial impact, if any, of these proceedings on the company.

Interest Rate Swap Antitrust Litigation. The company is among the defendants named in a putative antitrust class action relating to the trading of interest rate swaps, filed in November 2015 and consolidated in the U.S. District Court for the Southern District of New York. The company is also among the defendants named in two antitrust actions relating to the trading of interest rate swaps, commenced in April 2016 and June 2018, respectively, in the U.S. District Court for the Southern District of New York by three operators of swap execution facilities and certain of their affiliates. These actions have been consolidated for pretrial proceedings. The complaints generally assert claims under federal antitrust law and state common law in connection with an alleged conspiracy among the defendants to preclude exchange trading of interest rate swaps. The complaints in the individual actions also assert claims under state antitrust law. The complaints seek declaratory and injunctive relief, as well as treble damages in an unspecified amount. Defendants moved to dismiss the class and the first individual action and the district court dismissed the state common law claims asserted by the plaintiffs in the first individual action and otherwise limited the state common law claim in the putative class action and the antitrust claims in both actions to the period from 2013 to 2016. On November 20, 2018, the court granted in part and denied in part the defendants' motion to dismiss the second individual action, dismissing the state common law claims for unjust enrichment and tortious interference, but denying dismissal of the federal and state antitrust claims. On March 13, 2019, the court denied the plaintiffs' motion in the putative class action to amend their complaint to add allegations related to 2008-2012 conduct, but granted the motion to add limited allegations from 2013-2016, which the plaintiffs added in a fourth consolidated amended complaint filed on March 22, 2019. The plaintiffs in the putative class action moved for class certification on March 7, 2019.

Notes to the Financial Statements

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

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 as to all remaining claims. Certain plaintiffs subsequently appealed in December 2016. On August 27, 2019, the Second Circuit vacated the district court's dismissals and remanded the case to district court for further proceedings.

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 public offering process;
- Investment management and financial advisory services;
- Conflicts of interest;
- Transactions involving government-related financings and other matters;

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

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

Note 27.

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 annual report and are identified as audited, where relevant.

Notes to the Financial Statements

Note 28.

Financial Assets and Liabilities

Financial Assets and Liabilities by Category

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

\$ in millions	Financial Assets		
	Mandatorily at fair value	Amortised cost	Total
As of November 2019			
Financial instruments owned	\$ 788,407	\$ -	\$ 788,407
Collateralised agreements	91,586	64,762	156,348
Debtors	-	73,256	73,256
Cash at bank and in hand	-	22,397	22,397
Total financial assets	\$ 879,993	\$160,415	\$1,040,408

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

\$ in millions	Financial Liabilities			Total
	Held for trading	Designated at fair value	Amortised cost	
As of November 2019				
Amounts falling due within one year				
Financial instruments sold, but not yet purchased	\$714,640	\$ -	\$ -	\$ 714,640
Collateralised financings	-	68,456	56,284	124,740
Other creditors	-	8,888	84,241	93,129
Total	714,640	77,344	140,525	932,509
Amounts falling due after more than one year				
Collateralised financings	-	5,347	-	5,347
Other creditors	-	40,351	28,715	69,066
Total	-	45,698	28,715	74,413
Total financial liabilities	\$714,640	\$123,042	\$169,240	\$1,006,922

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

In the tables above financial instruments owned included derivative instruments designated as hedges of \$18 million as of November 2019 and \$26 million as of November 2018.

Fair Value Hierarchy

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

U.K. GAAP has a three-level hierarchy for disclosure of fair value measurements. This hierarchy prioritises inputs to the valuation techniques used to measure fair value, giving the highest priority to level 1 inputs and the lowest priority to level 3 inputs. A financial instrument's level in the hierarchy is based on the lowest level of input that is significant to its fair value measurement.

The fair value hierarchy is as follows:

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

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

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

The fair values for substantially all of the company's financial assets and 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 appropriate valuation adjustments that a market participant would require to arrive at fair value for factors such as counterparty and the company's and GS Group's credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads. Valuation adjustments are generally based on market evidence.

Notes to the Financial Statements

Valuation Techniques and Significant Inputs

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

Level 1 Cash Instruments

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

Level 2 Cash Instruments

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

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

Level 3 Cash Instruments

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

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

- **Mortgages and Other Asset-Backed Loans and Securities.** Significant inputs are generally determined based on relative value analyses and include:
 - Market yields implied by transactions of similar or related assets;
 - Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral;
 - Current performance of the borrower or loan collateral and recovery assumptions if a default occurs; and
 - Timing of expected future cash flows (duration) which, in certain cases, may incorporate the impact of other unobservable inputs (e.g., prepayment speeds).
- **Corporate Debt Instruments and Government and Agency Obligations.** Significant inputs are generally determined based on relative value analyses, which incorporate comparisons both to prices of credit default swaps that reference the same or similar underlying instrument or entity and to other debt instruments for the same or similar issuer for which observable prices or broker quotations are available. Significant inputs include:
 - Market yields implied by transactions of similar or related assets;
 - Current levels and changes in market indices, such as the iTraxx and CDX (indices that track the performance of corporate credit);
 - Current performance of the borrower or loan collateral and recovery assumptions if a default occurs;
 - Maturity and coupon profile of the instrument; and
 - Market and transaction multiples for corporate debt instruments with convertibility or participation options.
- **Equity Securities.** Equity securities consists of private equity securities. Recent third-party completed or pending transactions (e.g., merger proposals, tender offers, debt restructurings) are considered to be the best evidence for any change in fair value. When these are not available, the following valuation methodologies are used, as appropriate:
 - Industry multiples and public comparables;
 - Transactions in similar instruments; and
 - Discounted cash flow techniques.

Notes to the Financial Statements

Derivative Instruments. Derivatives may be traded on an exchange (exchange-traded) or they may be privately negotiated contracts, which are usually referred to as OTC derivatives. Certain of the company's OTC derivatives are cleared and settled through central clearing counterparties (OTC-cleared), while others are bilateral contracts between two counterparties (bilateral OTC).

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

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

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

Liquidity is essential to observability of all product types. If transaction volumes decline, previously transparent prices and other inputs may become unobservable. Conversely, even highly structured products may at times have trading volumes large enough to provide observability of prices and other inputs.

Level 1 Derivatives

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

Level 2 Derivatives

Level 2 derivatives include OTC derivatives for which all significant valuation inputs are corroborated by market evidence and exchange-traded derivatives that are not actively traded and/or that are valued using models that calibrate to market-clearing levels of OTC derivatives. In evaluating the significance of a valuation input, the company considers, among other factors, a portfolio's net risk exposure to that input.

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

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

Notes to the Financial Statements

Level 3 Derivatives

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

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

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

Valuation Adjustments

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

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

Other Financial Assets and Liabilities. Valuation techniques and significant inputs of other financial assets and liabilities include:

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

Notes to the Financial Statements

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
As of November 2019				
Financial Assets				
Cash instruments	\$76,946	\$ 29,248	\$ 788	\$106,982
Derivative instruments	13	676,875	4,537	681,425
Financial instruments owned	76,959	706,123	5,325	788,407
Collateralised agreements	-	91,586	-	91,586
Debtors	-	-	-	-
Total financial assets	\$76,959	\$797,709	\$ 5,325	\$879,993
Financial Liabilities				
Amounts falling due within one year				
Cash instruments	\$38,594	\$ 5,337	\$ 219	\$ 44,150
Derivative instruments	15	667,680	2,795	670,490
Financial instruments sold, but not yet purchased	38,609	673,017	3,014	714,640
Collateralised financings	-	67,345	1,111	68,456
Other creditors	-	6,120	2,768	8,888
Total	38,609	746,482	6,893	791,984
Amounts falling due after more than one year				
Collateralised financings	-	5,347	-	5,347
Other creditors	-	34,938	5,413	40,351
Total	-	40,285	5,413	45,698
Total financial liabilities	\$38,609	\$786,767	\$12,306	\$837,682
Net derivative instruments	\$ (2)	\$ 9,195	\$ 1,742	\$ 10,935

As of November 2018

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

Significant Unobservable Inputs Used in Level 3 Fair Value Measurements

Cash Instruments. The company had level 3 cash instrument assets of \$788 million as of November 2019 and \$1.08 billion as of November 2018. Level 3 cash instrument liabilities were not material.

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

<i>\$ in millions</i>	Level 3 Cash Instruments Assets and Range of Significant Unobservable Inputs (Weighted Average) as of November	
	2019	2018
Mortgages and other asset-backed loans and securities		
Level 3 assets	\$126	\$171
Yield	1.2% to 18.6% (7.2%)	2.4% to 16.5% (6.5%)
Recovery rate	48.3% to 75.0% (61.6%)	19.0% to 75.0% (50.0%)
Duration (years)	0.5 to 10.6 (4.3)	0.5 to 13.4 (5.1)
Corporate debt instruments and government and agency obligations		
Level 3 assets	\$602	\$867
Yield	1.8% to 13.2% (5.4%)	0.7% to 28.2% (5.9%)
Recovery rate	0.0% to 69.5% (42.1%)	0.0% to 78.0% (51.7%)
Duration (years)	2.6 to 16.5 (7.5)	0.5 to 13.2 (2.6)
Equity securities		
Level 3 assets	\$60	\$45
Multiples	4.1x to 11.0x (5.4x)	4.1x to 11.0x (5.4x)

In the table above:

- Convertible debentures previously included within equity securities have been reclassified to corporate debt instruments and government and agency obligations. Comparatives have been updated to conform to the current period presentation.
- Ranges represent the significant unobservable inputs that were used in the valuation of each type of cash instrument.
- Weighted averages are calculated by weighting each input by the relative fair value of the cash instruments.
- The ranges and weighted averages of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one cash instrument. For example, the highest yield for mortgages and other asset-backed loans and securities is appropriate for valuing a specific mortgage but may not be appropriate for valuing any other mortgages. Accordingly, the ranges of inputs do not represent uncertainty in, or possible ranges of, fair value measurements of level 3 cash instruments.

Notes to the Financial Statements

- Increases in yield or duration used in the valuation of level 3 cash instruments would have resulted in a lower fair value measurement, while increases in recovery rate or multiples would have resulted in a higher fair value measurement as of both November 2019 and November 2018. Due to the distinctive nature of each level 3 cash instrument, the interrelationship of inputs is not necessarily uniform within each product type.
- Mortgages and other asset-backed loans and securities and corporate debt instruments and government and agency obligations are valued using discounted cash flows, and equity securities are valued using market comparables and discounted cash flows.
- The fair value of any one instrument may be determined using multiple valuation techniques. For example, market comparables and discounted cash flows may be used together to determine fair value. Therefore, the level 3 balance encompasses both of these techniques.

Derivative Instruments. The company had net level 3 derivative instruments of \$1.74 billion as of November 2019 and \$1.86 billion as of November 2018.

The company's net level 3 financial instruments relating to commodities derivatives was \$8 million as of November 2019 and \$2 million as of November 2018 for which the range of significant unobservable inputs has not been disclosed as the amounts are not material.

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

<i>\$ in millions</i>	Net Level 3 Derivative Instruments and Range of Significant Unobservable Inputs (Average/Median) as of November	
	2019	2018
Interest rates	\$202	\$76
Correlation	(42)% to 16% ((5)%/2%)	71% to 72% (72%/72%)
Volatility (bps)	50 to 70 (62/62)	64 to 143 (84/78)
Credit	\$2,344	\$2,003
Credit spreads (bps)	2 to 1,321 (122/83)	2 to 589 (141/104)
Upfront credit points	76 to 82 (80/81)	1 to 46 (22/22)
Recovery rates	10% to 41% (27%/25%)	25% to 45% (37%/40%)
Currencies	\$50	\$(115)
Correlation	20% to 23% (22%/22%)	5% to 32% (18%/15%)
Equities	\$(862)	\$(108)
Correlation	(70)% to 97% (43%/45%)	(63)% to 98% (47%/53%)
Volatility	2% to 70% (12%/6%)	4% to 81% (17%/13%)

In the table above:

- Net derivative assets are shown as positive amounts and net derivative liabilities are shown as negative amounts.
- Ranges represent the significant unobservable inputs that were used in the valuation of each type of derivative.

- Averages represent the arithmetic average of the inputs and are not weighted by the relative fair value or notional of the respective financial instruments. An average greater than the median indicates that the majority of inputs are below the average.
- The ranges, averages and medians of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one derivative. For example, the highest correlation for interest rate derivatives is appropriate for valuing a specific interest rate derivative but may not be appropriate for valuing any other interest rate derivative. Accordingly, the ranges of inputs do not represent uncertainty in, or possible ranges of, fair value measurements of level 3 derivatives.
- Interest rates, currencies and equities derivatives are valued using option pricing models, and credit derivatives are valued using option pricing, correlation and discounted cash flow models.
- The fair value of any one instrument may be determined using multiple valuation techniques. For example, option pricing models and discounted cash flows models are typically used together to determine fair value. Therefore, the level 3 balance encompasses both of these techniques.
- Correlation within currencies and equities includes cross-product type correlation.

Range of Significant Unobservable Inputs

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

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

Notes to the Financial Statements

Sensitivity of Fair Value Measurement to Changes in Significant Unobservable Inputs

The following is a description of the directional sensitivity of the company's level 3 fair value measurements to changes in significant unobservable inputs, in isolation, as of each period-end:

- **Correlation.** In general, for contracts where the holder benefits from the consistent directional performance of the underlying asset or index prices (e.g., interest rates, credit spreads, foreign exchange rates, inflation rates and equity prices), an increase in correlation results in a higher fair value measurement.
- **Volatility.** In general, for purchased options, an increase in volatility results in a higher fair value measurement.
- **Credit spreads, upfront credit points and recovery rates.** In general, the fair value of purchased credit protection increases as credit spreads or upfront credit points increase or recovery rates decrease, and the fair value of secured funding capacity increases as secured funding spreads increase. Credit spreads, upfront credit points and recovery rates are strongly related to distinctive risk factors of the underlying reference obligations, which include reference entity-specific factors such as leverage, volatility and industry, market-based risk factors, such as borrowing costs or liquidity of the underlying reference obligation, and macroeconomic conditions.

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

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

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

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

During the period ended November 2019 and period ended November 2018, 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

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 \$295 million as of November 2019 and \$356 million as of November 2018, for favourable changes, and \$237 million as of November 2019 and \$240 million as of November 2018, for unfavourable changes. In determining reasonably possible alternative unfavourable assumptions, a detailed business and position level review has been performed to identify and quantify instances where potential uncertainty exists. This has taken into account the positions' fair value as compared to the range of available market information. As of November 2019 and November 2018, the impact for favourable changes was primarily driven by changes in the assumptions around secured funding spreads and valuation adjustments in equity and fixed income derivatives, and the impact for unfavourable changes was primarily driven by changes in the assumptions around secured funding spreads, volatility and correlation inputs.

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

\$ in millions	Period Ended November	
	2019	2018
Beginning balance	\$146	\$ 161
New transactions	90	92
Amounts recognised in the profit and loss account during the period	(83)	(107)
Ending balance	\$153	\$ 146

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.

\$ in millions	Period Ended November	
	2019	2018
Total financial assets		
Beginning balance	\$ 5,314	\$ 4,044
Gains/(losses)	942	688
Purchases	659	647
Sales	(249)	(223)
Settlements	(1,039)	(620)
Transfers into level 3	445	974
Transfers out of level 3	(747)	(196)
Ending balance	\$ 5,325	\$ 5,314
Total financial liabilities		
Beginning balance	\$(12,874)	\$(10,807)
Gains/(losses)	(1,745)	468
Purchases	7	16
Sales	(418)	(424)
Issuances	(6,352)	(7,735)
Settlements	8,710	5,838
Transfers into level 3	(852)	(641)
Transfers out of level 3	1,218	411
Ending balance	\$(12,306)	\$(12,874)

In the table above:

- Financial assets relate to financial instruments owned.
- If a financial asset or financial liability was transferred to level 3 during a reporting period, its entire gain or loss for the period is classified in level 3. For level 3 financial assets, increases are shown as positive amounts, while decreases are shown as negative amounts. For level 3 financial liabilities, increases are shown as negative amounts, while decreases are shown as positive amounts.
- Transfers between levels of the fair value hierarchy are recognised at the beginning of the reporting period in which they occur. Accordingly, the tables do not include gains or losses for level 3 financial assets and 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.
- The net gains on level 3 financial assets for the period ended November 2019 and period ended November 2018 are reported in "Net revenues" in the profit and loss account.

Notes to the Financial Statements

- The net losses on level 3 financial liabilities of \$1.75 billion for the period ended November 2019 included losses of \$1.63 billion reported in “Net revenues” in the profit and loss account and losses of \$120 million reported in “Debt valuation adjustment” in the statements of comprehensive income. The net gains on level 3 financial liabilities of \$468 million for the period ended November 2018 included gains of \$339 million reported in “Net revenues” in the profit and loss account and gains of \$129 million reported in “Debt valuation adjustment” in the statements of comprehensive income

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

\$ in millions	Period Ended November	
	2019	2018
Financial instruments sold, but not yet purchased		
Beginning balance	\$ (2,385)	\$(2,281)
Gains/(losses)	(918)	(275)
Purchases	7	16
Sales	(418)	(424)
Settlements	645	665
Transfers into level 3	(294)	(244)
Transfers out of level 3	349	158
Ending balance	\$(3,014)	\$(2,385)
Collateralised financings		
Beginning balance	\$ (936)	\$(642)
Gains/(losses)	68	82
Issuances	(263)	(393)
Settlements	1	17
Transfers out of level 3	19	–
Ending balance	\$(1,111)	\$(936)
Other creditors		
Beginning balance	\$ (9,553)	\$(7,884)
Gains/(losses)	(895)	661
Issuances	(6,089)	(7,342)
Settlements	8,064	5,156
Transfers into level 3	(558)	(397)
Transfers out of level 3	850	253
Ending balance	\$(8,181)	\$(9,553)

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.

Period Ended November 2019

Transfers into level 3 financial instruments owned primarily reflected transfers of certain credit derivatives from level 2, principally due to reduced transparency of certain credit spread inputs and transfers of certain equity derivatives from level 2, principally due to reduced transparency of certain volatility and correlation inputs.

Transfers out of level 3 financial instruments owned primarily reflected transfers of certain credit derivatives to level 2, principally due to increased transparency of certain credit spread inputs, 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.

Period Ended November 2018

Transfers into level 3 financial instruments owned primarily reflected transfers of certain credit derivatives from level 2, principally due to reduced transparency of certain credit spread inputs, transfers of certain cash instruments from level 2, principally due to reduced transparency of certain yield inputs and transfers of certain currency derivatives from level 2, principally due reduced transparency of certain modelling assumptions.

Transfers out of level 3 financial instruments owned 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.

Financial Liabilities.

Period Ended November 2019

Transfers into level 3 financial instruments sold, but not yet purchased primarily reflected transfers of certain credit derivatives from level 2, principally due to reduced transparency of certain credit spread inputs and transfers of certain equity derivatives from level 2, principally due to reduced transparency of certain volatility and correlation inputs. Transfers into level 3 other creditors primarily reflected transfers of certain hybrid financial instruments from level 2, principally due to reduced transparency of certain volatility and correlation inputs.

Notes to the Financial Statements

Transfers out of level 3 financial instruments sold, but not yet purchased primarily reflected transfers of certain credit derivatives to level 2, principally due to increased transparency of certain credit spread inputs and transfers of certain equity derivatives to level 2, principally due to increased transparency of certain volatility and correlation inputs. Transfers out of level 3 other creditors primarily reflected transfers of certain hybrid financial instruments to level 2, principally due to increased transparency of certain volatility and correlation inputs.

Period Ended November 2018

Transfers into level 3 financial instruments sold, but not yet purchased primarily reflected transfers of certain currency derivatives from level 2, principally due reduced transparency of certain modelling assumptions. Transfers into level 3 other creditors primarily reflected transfers of certain hybrid financial instruments from level 2, principally due reduced transparency of certain volatility and correlation inputs.

Transfers out of level 3 financial instruments sold, but not yet purchased primarily reflected transfers of certain equity derivatives to level 2, principally due to increased transparency of certain volatility and correlation inputs. Transfers out of level 3 other creditors 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 current financial assets of \$160.42 billion as of November 2019 and \$144.66 billion as of November 2018 that are not measured at fair value. Given that substantially all of these balances are short-term in nature, their carrying values in the balance sheet are a reasonable approximation of fair value.

The company had current financial liabilities of \$140.53 billion as of November 2019 and \$131.97 billion as of November 2018 that are not measured at fair value. Given the short-term nature of these instruments, their carrying values in the balance sheet are a reasonable approximation of fair value. The company had financial liabilities that are due after more than one year of \$28.72 billion as of November 2019 and \$15.86 billion as of November 2018 that are not measured at fair value which predominantly relate to long-term intercompany loans. The interest rates of these loans are variable in nature and approximate prevailing market interest rates for instruments with similar terms and characteristics. As such, their carrying values in the balance sheet are a reasonable approximation of fair value.

Maturity of Financial Liabilities

The table below presents a summary of the cash flows of the company's financial liabilities by contractual maturity except for financial instruments sold, but not yet purchased, which are classified as trading/on demand.

\$ in millions	As of November	
	2019	2018
Trading/on demand	\$ 838,683	\$662,378
Less than 1 month	96,100	112,088
1 – 3 months	30,811	26,951
3 months – 1 year	33,897	47,289
1 – 5 years	59,080	50,389
Greater than 5 years	17,848	20,483
Total	\$1,076,419	\$919,578

The tables below present an analysis of the cash flows of the company's financial liabilities by contractual maturity except for financial instruments sold, but not yet purchased, which are classified as trading/on demand.

\$ in millions	Financial instruments sold, but not yet purchased	Collateralised financings	Other creditors	Total
As of November 2019				
Amounts falling due within one year				
Trading/on demand	\$714,640	\$ 46,348	\$ 74,945	\$ 835,933
Less than 1 month	–	36,404	1,351	37,755
1 – 3 months	–	25,350	2,872	28,222
3 months – 1 year	–	16,652	14,039	30,691
1 – 5 years	–	–	–	–
Greater than 5 years	–	–	–	–
Total	\$714,640	\$124,754	\$ 93,207	\$ 932,601
Amounts falling due after more than one year				
Trading/on demand	\$ –	\$ –	\$ –	\$ –
Less than 1 month	–	–	90	90
1 – 3 months	–	1	179	180
3 months – 1 year	–	–	900	900
1 – 5 years	–	3,608	54,952	58,560
Greater than 5 years	–	1,739	16,105	17,844
Total	\$ –	\$ 5,348	\$ 72,226	\$ 77,574
Total – on balance sheet	\$714,640	\$130,102	\$165,433	\$1,010,175

\$ in millions	Contingent and forward starting collateralised agreements	Operating leases	Other	Total
As of November 2019				
Trading/on demand	\$ –	\$ –	\$ 2,750	\$ 2,750
Less than 1 month	58,253	2	–	58,255
1 – 3 months	2,285	3	121	2,409
3 months – 1 year	2,258	13	35	2,306
1 – 5 years	496	24	–	520
Greater than 5 years	–	4	–	4
Total – off balance sheet	\$ 63,292	\$ 46	\$ 2,906	\$ 66,244

Notes to the Financial Statements

<i>\$ in millions</i>	Financial instruments sold, but not yet purchased	Collateralised financings	Other creditors	Total
As of November 2018				
Amounts falling due within one year				
Trading/on demand	\$545,987	\$ 45,078	\$ 69,014	\$ 660,079
Less than 1 month	–	50,016	1,652	51,668
1 – 3 months	–	23,778	2,799	26,577
3 months – 1 year	–	22,974	23,394	46,368
1 – 5 years	–	–	–	–
Greater than 5 years	–	–	–	–
Total	\$545,987	\$141,846	\$ 96,859	\$ 784,692
Amounts falling due after more than one year				
Trading/on demand	\$ –	\$ –	\$ –	\$ –
Less than 1 month	–	1	80	81
1 – 3 months	–	–	162	162
3 months – 1 year	–	–	860	860
1 – 5 years	–	8,026	42,149	50,175
Greater than 5 years	–	2,281	18,196	20,477
Total	\$ –	\$ 10,308	\$ 61,447	\$ 71,755
Total – on balance sheet	\$545,987	\$152,154	\$158,306	\$ 856,447

<i>\$ in millions</i>	Contingent and forward starting collateralised agreements	Operating leases	Other	Total
As of November 2018				
Trading/on demand	\$ –	\$ –	\$ 2,299	\$ 2,299
Less than 1 month	60,332	7	–	60,339
1 – 3 months	198	14	–	212
3 months – 1 year	–	61	–	61
1 – 5 years	–	113	101	214
Greater than 5 years	–	6	–	6
Total – off balance sheet	\$ 60,530	\$ 201	\$ 2,400	\$ 63,131

In the tables above:

- Cash flows by contractual maturity include interest that will accrue on financial liabilities.
- Financial liabilities, with the exception of those that are held for trading or designated at fair value through profit or loss, are disclosed at their undiscounted cash flows. The fair values of financial liabilities held for trading and financial liabilities designated at fair value through profit or loss have been disclosed as this is consistent with the values used in the liquidity risk management of these instruments.
- Liquidity risk on derivatives is mitigated through master netting agreements and cash collateral arrangements.

Collateral Received and Pledged

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

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

The table below presents financial instruments received as collateral that were available to be delivered or repledged, and that were delivered or repledged by the company.

<i>\$ in millions</i>	As of November	
	2019	2018
Collateral available to be delivered or repledged	\$468,465	\$484,249
Collateral that was delivered or repledged	\$419,742	\$429,161

The company also pledges certain financial instruments owned in connection with repurchase agreements, securities lending agreements and other secured financings to counterparties who may or may not have the right to deliver or repledge.

The table below presents information about assets pledged.

<i>\$ in millions</i>	As of November	
	2019	2018
Financial instruments owned pledged to counterparties that:		
Had the right to deliver or repledge	\$35,335	\$20,550
Did not have the right to deliver or repledge	\$34,072	\$30,177

The company has received cash collateral of \$58.71 billion as of November 2019 and \$54.10 billion as of November 2018 and posted cash collateral of \$48.83 billion as of November 2019 and \$44.97 billion as of November 2018. Amounts received and posted are mainly in respect of financial instruments owned and financial instruments sold, but not yet purchased.

Notes to the Financial Statements

In addition to repurchase agreements and securities lending transactions, the company funds certain assets through the use of other secured financings and pledges financial instruments as collateral in these transactions. These other secured financings consist of liabilities related to special purpose entities, transfers of financial assets that are accounted for as financings rather than sales and other structured financing arrangements. Other secured financings include arrangements that are non-recourse.

Hedge Accounting

The company designates certain interest rate swaps as fair value hedges that are used to manage the interest rate exposure of certain fixed-rate unsecured long-term and short-term debt. These interest rate swaps hedge changes in fair value attributable to the relevant benchmark interest rate (e.g., LIBOR), effectively converting fixed-rate obligations into floating-rate obligations.

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

- Differences in timing of cash flows between the hedged item and hedging instrument.
- Differences in discounting between the hedged item and the hedging instrument, as cash collateralised derivatives are discounted using Overnight Indexed Swap discount curves, which are not consistently applied to the hedged item.
- Counterparty credit risk impacting fair value movements on uncollateralised interest rate swaps but not the underlying hedged item.

For qualifying fair value hedges, gains or losses on derivatives and the change in fair value of the hedged item attributable to the hedged risk are included in net revenues. When a derivative is no longer designated as a hedge, any remaining difference between the carrying value and par value of the hedged item is amortised over the remaining life of the hedged item using the effective interest method.

The table below presents the notional of hedging instruments by contractual maturity date.

<i>\$ in millions</i>	As of November	
	2019	2018
Less than 1 month	\$ –	\$ –
1 – 3 months	2	–
3 months – 1 year	6	93
1 – 5 years	125	14
Greater than 5 years	2,804	2,728
Total	\$2,937	\$2,835

The average fixed rate of the company's hedging instruments was 1.25% for the period ended November 2019 and 1.19% for the period ended November 2018.

The table below presents information about hedging instruments, which are classified in derivative instruments.

<i>\$ in millions</i>	As of November	
	2019	2018
Asset carrying value	\$18	\$26
Liability carrying value	\$ –	\$ –

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

<i>\$ in millions</i>	Carrying value	Cumulative hedging adjustment
As of November 2019		
Unsecured short-term borrowings	\$ 8	\$ –
Unsecured long-term borrowings	\$2,841	\$133
As of November 2018		
Unsecured short-term borrowings	\$ 85	\$ –
Unsecured long-term borrowings	\$2,582	\$ 28

The table below presents the gains/(losses) from interest rate derivatives accounted for as hedges, the related hedged borrowings and the hedge ineffectiveness on these derivatives, recognised in net revenues.

<i>\$ in millions</i>	Period Ended November	
	2019	2018
Interest rate hedges	\$ 108	\$ 16
Hedged borrowings	(108)	(22)
Hedge ineffectiveness	\$ –	\$ (6)

Notes to the Financial Statements

Unconsolidated Structured Entities

The company has interests in structured entities that it does not control (unconsolidated structured entities), which primarily includes: senior and subordinated debt; derivatives and guarantees.

Structured entities generally finance the purchase of assets by issuing debt securities that are either collateralised by or indexed to the assets held by the structured entity. The debt securities issued by a structured entity may include tranches of varying levels of subordination. The company's involvement with structured entities primarily includes securitisation of financial assets.

In certain instances, the company provides guarantees, including derivative guarantees, to unconsolidated structured entities or holders of interests in unconsolidated structured entities.

The table below presents a summary of the unconsolidated structured entities in which the company holds interests.

\$ in millions	As of November	
	2019	2018
Assets in structured entities	\$5,563	\$6,467
Carrying value of interests - assets	\$ 308	\$ 419
Carrying value of interests - liabilities	\$ (27)	\$ (6)
Maximum exposure to loss	\$3,787	\$3,816

In the table above:

- The carrying values of the company's interests are included in the balance sheet in "Financial instruments owned" or "Financial instruments sold, but not yet purchased".
- The company's maximum exposure to loss is mainly a result of derivatives, commitments and guarantees, for which the maximum exposure to loss is the notional amount, which does not represent anticipated losses and also has not been reduced by unrealised losses already recorded. As a result, the maximum exposure to loss exceeds liabilities recorded for derivatives, commitments and guarantees.

Transferred Assets

Assets Continued to be Recognised in Full. During the period, the company transferred certain financial assets where the transfers failed to meet the derecognition criteria, as contained in IFRS 9, and as a result of which the company continues to recognise these assets in full in the balance sheet.

The company transfers assets owned to counterparties in the ordinary course of business to collateralise repurchase agreements and other securities lending transactions. In these transactions the transferred assets continue to be recognised by the company for accounting purposes because the transactions require the financial instruments to be repurchased at maturity of the agreement and the company remains exposed to the price, credit and interest rate risk of these instruments. When the company receives cash proceeds from the transfer of the asset, a financial liability is recognised in respect of the consideration received and recorded in "Collateralised financings". When the company receives non cash collateral (in the form of securities) no liability is initially recognised. If collateral received is subsequently sold, the obligation to return the collateral is recognised as a liability in "Financial instruments sold, but not yet purchased".

In addition to repurchase agreements and securities lending agreements, the company obtains funding through the use of other arrangements that fail to meet the derecognition criteria. For example, sales of securities with related derivatives, such as total return swaps, through which the company retains substantially all of the risk and reward of the transferred assets. A financial liability is recognised in such cases for the proceeds received.

Other financial assets transferred that continue to be recognised on balance sheet for accounting purposes relate to pledges of securities as collateral, primarily for derivative transactions. The obligations under such derivatives are recorded in "Financial instruments sold, but not yet purchased".

The table below presents financial assets which have been transferred but which remain on balance sheet for accounting purposes.

\$ in millions	As of November	
	2019	2018
Money market instruments	\$ 2	\$ -
Government and agency obligations	27,626	22,951
Mortgage and other asset-backed loans and securities	147	-
Corporate debt instruments	9,180	7,316
Equity securities	32,453	20,460
Total	\$69,408	\$50,727

In the table above:

- The carrying amount of the associated financial liabilities generally approximate the carrying amount of the assets transferred.
- Convertible debentures previously included within equity securities have been reclassified to corporate debt instruments. Comparatives have been updated to conform to the current period presentation.

Notes to the Financial Statements

Derecognised Assets With Ongoing Exposure. The company has continuing involvement in the form of derivative transactions and guarantees with certain unconsolidated structured entities to which the company had transferred financial assets. These derivatives may be credit-linked to the asset transferred and result in the company retaining specific risks in the transferred asset or require the company to make payments to the structured entity to compensate losses on the asset if certain contingent events occur.

In addition, the company transfers financial assets to securitisation vehicles. The company generally receives cash in exchange for the transferred assets but may have continuing involvement with the transferred assets, including ownership of beneficial interests in the securitised financial assets, primarily in the form of debt instruments. The company may also purchase senior or subordinated securities issued by securitisation vehicles in connection with secondary market-making activities.

Where the company's continuing involvement in transferred assets is through derivatives or guarantees, the maximum exposure to loss is the notional amounts of the derivative or guarantee. For retained or purchased interests in securitised assets, the company's risk of loss is limited to the fair value of these interests. In all cases these retained interests are carried at fair value.

The company accounts for assets pending transfer at fair value and therefore does not typically recognise significant gains or losses upon the transfer of assets. The company does not have continuing involvement that could require the company to repurchase derecognised financial assets.

The tables below present information about the company's exposure through continuing involvement and the gains or losses related to those transactions.

<i>\$ in millions</i>	Carrying amount	Maximum exposure to loss
As of November 2019		
Assets		
Cash instruments	\$ 1	\$ 46
Derivative instruments	85	693
Financial instruments owned	86	739
Total	\$ 86	\$739
Liabilities		
Derivatives instruments	\$(20)	\$245
Financial instruments sold, but not yet purchased	(20)	245
Total	\$(20)	\$245

<i>As of November 2018</i>		
Assets		
Cash instruments	\$ -	\$ -
Derivative instruments	63	802
Financial instruments owned	63	802
Total	\$ 63	\$802
Liabilities		
Derivatives instruments	\$ (1)	\$111
Financial instruments sold, but not yet purchased	(1)	111
Total	\$ (1)	\$111

<i>\$ in millions</i>	Income/ (expense) in the period	Cumulative income/ (expense)
As of November 2019		
Assets		
Cash instruments	\$ 1	\$133
Derivative instruments	68	189
Financial instruments owned	69	322
Total	\$69	\$322
Liabilities		
Derivatives instruments	\$34	\$ (1)
Financial instruments sold, but not yet purchased	34	(1)
Other creditors	-	(1)
Total	\$34	\$ (2)

<i>As of November 2018</i>		
Assets		
Cash instruments	\$ -	\$132
Derivative instruments	(3)	121
Financial instruments owned	(3)	253
Total	\$ (3)	\$253
Liabilities		
Derivatives instruments	\$ -	\$ (35)
Financial instruments sold, but not yet purchased	-	(35)
Other creditors	-	(1)
Total	\$ -	\$ (36)

Notes to the Financial Statements

Note 29.

Offsetting of Financial Assets and Liabilities

The tables below present the company's financial assets and liabilities that are subject to enforceable netting agreements and offsetting. Amounts are only offset in the balance sheet when the company currently has a legally enforceable right to set-off the recognised amounts and an intention either to settle on a net basis, or to realise the asset and settle the liability simultaneously. In the tables below:

- Gross amounts exclude the effects of both counterparty netting and collateral, and therefore are not representative of the company's economic exposure.
- Amounts not offset in the balance sheet include 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 posted under enforceable credit support agreements, that do not meet the criteria for offsetting under U.K. GAAP.

- Where the company has received or posted collateral under credit support agreements, but has not yet determined whether such agreements are enforceable, the related collateral has not been included in the amounts not offset in the balance sheet.
- Gross amounts included derivative assets of \$4.65 billion and derivative liabilities of \$4.96 billion as of November 2019, and derivative assets of \$6.15 billion and derivative liabilities of \$5.10 billion as of November 2018, which are not subject to an enforceable netting agreement or are subject to a netting agreement that the company has not yet determined to be enforceable.
- Substantially all resale agreements and securities borrowed within collateralised agreements and repurchase agreements and securities loaned within collateralised financings are subject to enforceable netting agreements as of November 2019 and November 2018.

	As of November 2019						
	Gross amounts	Amounts offset in the balance sheet	Net amount the balance sheet	Amounts not offset in the balance sheet			
				Counterparty netting	Cash collateral	Security collateral	Net amount
<i>\$ in millions</i>							
Financial Assets							
Cash instruments	\$ 18,712	\$ (12,834)	\$ 5,878	\$ (1,108)	\$ –	\$ (4,450)	\$ 320
Derivative instruments	692,404	(10,979)	681,425	(610,681)	(40,336)	(11,283)	19,125
Financial instruments owned	711,116	(23,813)	687,303	(611,789)	(40,336)	(15,733)	19,445
Collateralised agreements	216,916	(60,568)	156,348	(65,240)	–	(88,735)	2,373
Debtors	83,400	(23,902)	59,498	(4,199)	(39,222)	(10,159)	5,918
Financial assets subject to enforceable netting agreements	1,011,432	(108,283)	903,149	(681,228)	(79,558)	(114,627)	27,736
Financial assets not subject to enforceable netting agreements	137,259	–	137,259	–	–	–	137,259
Total financial assets	\$1,148,691	\$(108,283)	\$1,040,408	\$(681,228)	\$(79,558)	\$(114,627)	\$164,995
Financial Liabilities							
Amounts falling due within one year							
Cash instruments	\$ 1,423	\$ (1,218)	\$ 205	\$ –	\$ –	\$ –	\$ 205
Derivative instruments	681,774	(11,284)	670,490	(610,920)	(38,186)	(8,188)	13,196
Financial instruments sold, but not yet purchased	683,197	(12,502)	670,695	(610,920)	(38,186)	(8,188)	13,401
Collateralised financings	203,558	(85,466)	118,092	(65,278)	(404)	(51,068)	1,342
Other creditors	67,918	(2,545)	65,373	(4,839)	(40,392)	–	20,142
Total	954,673	(100,513)	854,160	(681,037)	(78,982)	(59,256)	34,885
Amounts falling due after more than one year							
Collateralised financings	9,639	(6,046)	3,593	(132)	(500)	(2,452)	509
Other creditors	3,090	(1,724)	1,366	(59)	(76)	–	1,231
Total	12,729	(7,770)	4,959	(191)	(576)	(2,452)	1,740
Financial liabilities subject to enforceable netting agreements	967,402	(108,283)	859,119	(681,228)	(79,558)	(61,708)	36,625
Financial liabilities not subject to enforceable netting agreements	147,803	–	147,803	–	–	–	147,803
Total financial liabilities	\$1,115,205	\$(108,283)	\$1,006,922	\$(681,228)	\$(79,558)	\$(61,708)	\$184,428

Notes to the Financial Statements

As of November 2018

<i>\$ in millions</i>	Amounts not offset in the balance sheet						
	Gross amounts	Amounts offset in the balance sheet	Net amount presented in the balance sheet	Counterparty netting	Cash collateral	Security collateral	Net amount
Financial Assets							
Cash instruments	\$ 18,880	\$ (13,407)	\$ 5,473	\$ (1,595)	\$ (43)	\$ (3,448)	\$ 387
Derivative instruments	523,283	(10,720)	512,563	(448,264)	(34,886)	(10,769)	18,644
Financial instruments owned	542,163	(24,127)	518,036	(449,859)	(34,929)	(14,217)	19,031
Collateralised agreements	270,215	(66,881)	203,334	(83,337)	–	(116,825)	3,172
Debtors	69,213	(15,727)	53,486	(5,450)	(32,439)	(7,415)	8,182
Financial assets subject to enforceable netting agreements	881,591	(106,735)	774,856	(538,646)	(67,368)	(138,457)	30,385
Financial assets not subject to enforceable netting agreements	111,490	–	111,490	–	–	–	111,490
Total financial assets	\$ 993,081	\$(106,735)	\$ 886,346	\$(538,646)	\$(67,368)	\$(138,457)	\$141,875
Financial Liabilities							
Amounts falling due within one year							
Cash instruments	\$ 730	\$ (709)	\$ 21	\$ –	\$ –	\$ –	\$ 21
Derivative instruments	509,108	(10,720)	498,388	(448,348)	(30,815)	(5,867)	13,358
Financial instruments sold, but not yet purchased	509,838	(11,429)	498,409	(448,348)	(30,815)	(5,867)	13,379
Collateralised financings	219,104	(82,614)	136,490	(83,130)	(1,181)	(50,782)	1,397
Other creditors	66,083	(3,862)	62,221	(6,552)	(34,944)	–	20,725
Total	795,025	(97,905)	697,120	(538,030)	(66,940)	(56,649)	35,501
Amounts falling due after more than one year							
Collateralised financings	14,456	(7,105)	7,351	(245)	(428)	(6,070)	608
Other creditors	3,264	(1,725)	1,539	(371)	–	–	1,168
Total	17,720	(8,830)	8,890	(616)	(428)	(6,070)	1,776
Financial liabilities subject to enforceable netting agreements	812,745	(106,735)	706,010	(538,646)	(67,368)	(62,719)	37,277
Financial liabilities not subject to enforceable netting agreements	146,903	–	146,903	–	–	–	146,903
Total financial liabilities	\$ 959,648	\$(106,735)	\$ 852,913	\$(538,646)	\$(67,368)	\$(62,719)	\$184,180

Note 30.**Non-Adjusting Post Balance Sheet Events**

Since the balance sheet date there has been a global outbreak of a novel strain of coronavirus (COVID-19) which is causing widespread disruption to financial markets and normal patterns of business activity across the world, including the U.K. In view of its currently evolving nature, it is not currently possible to estimate the financial impact of COVID-19 on the company. See “Future Outlook” and “Principal Risks and Uncertainties — Unforeseen or Catastrophic Events” in the strategic report for further information.