

# Unaudited Half-yearly Financial Report June 30, 2019

Goldman Sachs Finance Corp International Ltd Company Number: 122341 GOLDMAN SACHS FINANCE CORP INTERNATIONAL LTD UNAUDITED HALF-YEARLY FINANCIAL REPORT FOR THE HALF YEAR ENDED JUNE 30, 2019

### INDEX

	Page No.
Part I	
Management Report	3
Introduction	3
Executive Overview	3
Business Environment	3
Principal Risks and Uncertainties	4
Directors	4
Responsibility Statement	4

	Page No.
Part II	
Unaudited Financial Statements	5
Profit and Loss Account	5
Statements of Comprehensive Income	5
Balance Sheet	6
Statements of Changes in Equity	7
Statements of Cash Flows	7
Notes to the Financial Statements	8
Note 1. General Information	8
Note 2. Summary of Significant Accounting Policies	8
Note 3. Critical Accounting Estimates and Judgements	8
Note 4. Net Revenues	8
Note 5. Segment Reporting	9
Note 6. Administrative Expenses	9
Note 7. Staff Costs	9
Note 8. Tax on Loss	9
Note 9. Derivative Financial Assets and Derivative Financial	
Liabilities	9
Note 10. Debtors	9
Note 11. Other Creditors	10
Note 12. Share Capital	10
Note 13. Cash and Cash Equivalents	10
Note 14. Reconciliation of Cash Flows From Operating	
Activities	10
Note 15. Financial Commitments and Contingencies	11
Note 16. Financial Assets and Financial Liabilities	11

### GOLDMAN SACHS FINANCE CORP INTERNATIONAL LTD Management Report

### Introduction

Goldman Sachs Finance Corp International Ltd (the company) issues warrants, certificates and notes (securities) in a number of European and Asian markets. The company is exposed to interest rate, equity price, currency rate and credit-related risks on the securities issued, and manages these risks by entering into over-the-counter (OTC) derivative transactions with affiliates. The proceeds from these securities are lent to affiliates.

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. 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. The securities issued by the company are fully and unconditionally guaranteed by Group Inc.

References to "the financial statements" are to the unaudited financial statements as presented in Part II of this financial report. All references to June 2019 and June 2018 refer to the periods ended, or the dates, as the context requires, June 30, 2019 and June 30, 2018, respectively. All references to December 2018 refer to the date December 31, 2018. All references to "the 2018 Annual Report" are to the company's Annual Report for the year ended December 31, 2018.

All amounts in this financial report are prepared in accordance with United Kingdom Generally Accepted Accounting Practices (U.K. GAAP).

### **Executive Overview**

### **Profit and Loss Account**

The profit and loss account is set out on page 5 of this financial report. The company's net result for the first half of 2019 was a loss of \$28 million, compared to a loss of \$3 million for the first half of 2018. The company's loss of \$28 million for the first half of 2019 was primarily related to net losses from the company's issuance, hedging and lending activity and early redemption of securities.

### **Other Comprehensive Income**

The statements of comprehensive income are set out on page 5 of this financial report. The company's other comprehensive income, which relates to the company's debt valuation adjustment (DVA), was a loss of \$300 million for the first half of 2019, compared with a gain of \$150 million for the first half of 2018.

### **Balance Sheet**

The balance sheet is set out on page 6 of this financial report. As of June 2019, total assets were \$11.54 billion, an increase of \$1.41 billion from December 2018, mainly reflecting an increase in debtors of \$1.17 billion. Debtors increased primarily due to an increase in loans to affiliates as a result of an increase in debt securities issued.

### **Business Environment**

During the first half of 2019, global economic activity appeared to be stable compared with the year ended December 2018. Continued concerns about future global growth and a mixed macroeconomic environment led U.S. markets to anticipate multiple U.S. Federal Reserve rate cuts this year and other global central banks to emphasise accommodative monetary policies. In addition, market sentiment during the first half of 2019 was impacted by continued geopolitical uncertainty, including developments related to the U.K.'s decision to leave the E.U. (Brexit) and the threat of expanding trade wars between the U.S. and both China and Mexico.

### **Principal Risks and Uncertainties**

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

### Directors

M. Sunaga resigned from the board of directors on July 22, 2019.

A. Bajpayi was appointed to the board of directors on July 24, 2019.

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

### **Responsibility Statement**

The financial statements have been prepared in accordance with FRS 104 'Interim Financial Reporting' and Article 5 of the Directive 2004/109/EC as amended by Directive 2013/50/EU. The directors confirm to the best of their knowledge:

- The financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the company;
- The management report includes an indication of important events that have occurred during the first six months of the financial year, and their impact on the financial statements, together with a description of the principal risks and uncertainties for the remaining six months of the financial year. These principal risks and uncertainties are consistent with those described in the 2018 Annual Report.

Kevi P. Kocha

K. G. Kochar Director September 30, 2019

### **Unaudited Financial Statements**

GOLDMAN SACHS FINANCE CORP INTERNATIONAL LTD Profit and Loss Account (Unaudited)

	SIX IVIO	ix Months	
	Ended	June	
Note	2019	2018	
4	\$ (27,813)	\$ (2,657)	
6	(67)	(89)	
	(27,880)	(2,746)	
8	-	_	
	\$ (27,880)	\$ (2,746)	
-	4 6	Note         Ended           4         \$ (27,813)           6         (67)           (27,880)           8         –	

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

# Statements of Comprehensive Income (Unaudited)

		Six Mo	
		Ended	June
\$ in thousands	Note	2019	2018
Loss for the financial period		\$ (27,880)	\$ (2,746)
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss			
Debt valuation adjustment	11	(300,218)	149,680
Tax attributable to the components of other comprehensive income		-	-
Other comprehensive income/(loss) for the financial period		(300,218)	149,680
Total comprehensive income/(loss) for the financial period		\$(328,098)	\$146,934

		As of		of	of	
			June		December	
\$ in thousands	Note		2019		2018	
Current assets						
Derivative financial assets	9	\$ 5	564,465	\$	322,789	
Debtors (includes <b>\$9,769,568</b> and \$8,925,071 due after more than one year)	10	10,9	966,041		9,796,433	
Cash at bank and in hand			13,262		12,619	
		11,5	543,768	1	0,131,841	
Creditors: amounts falling due within one year						
Derivative financial liabilities	9	(5	528,794)		(522,359)	
Other creditors	11		300,624)		(631,053)	
		-	829,418)	(	1,153,412)	
Net current assets		<b>)</b> ,7	714,350		8,978,429	
Total assets less current liabilities		9,7	714,350		8,978,429	
Creditors: amounts falling due after more than one year						
Other creditors	11	(9,6	628,262)	(8	8,564,243)	
			628,262)		8,564,243)	
Net assets		\$	86,088	\$	414,186	
Capital and reserves						
Called up share capital	12	\$	5,000	\$	5,000	
Share premium account		-	25,000		25,000	
Profit and loss account			43,705		54,552	
Accumulated other comprehensive income			12,383		329,634	
Total shareholder's funds		\$	86,088	\$	414,186	

### (Unaudited)

		Six N	Ionths
		Ende	d June
\$ in thousands	Note	2019	2018
Called up share capital			
Beginning balance		\$ 5,000	\$ 5,000
Ending balance		5,000	5,000
Share premium account			
Beginning balance		25,000	25,000
Ending balance		25,000	25,000
Profit and loss account			
Beginning balance		54,552	35,570
Cumulative effect on retained earnings due to the adoption of IFRS 9, net of tax		-	(447)
Transfer of realised debt valuation adjustment into retained earnings	11	17,033	_
Loss for the financial period		(27,880)	(2,746)
Ending balance		43,705	32,377
Accumulated other comprehensive income			
Beginning balance		329,634	(52,480)
Other comprehensive income/(loss)		(300,218)	149,680
Transfer of realised debt valuation adjustment into retained earnings	11	(17,033)	-
Ending balance		12,383	97,200
Total shareholder's funds		\$ 86,088	\$159,577

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

# Statements of Cash Flows (Unaudited)

		Six Months		
		Ended	June	
\$ in thousands	Note	2019	2018	
Cash flows from operating activities				
Cash generated from/(used in) operations	14	\$ 1,121	\$ (6,401)	
Net cash from/(used in) operating activities		1,121	(6,401)	
Net increase/(decrease) in cash and cash equivalents		1,121	(6,401)	
Cash and cash equivalents, beginning balance		12,619	19,738	
Foreign exchange losses on cash and cash equivalents		(478)	(236)	
Cash and cash equivalents, ending balance	13	\$ 13,262	\$ 13,101	

### Note 1.

### **General Information**

The company is a registered public limited company incorporated on October 19, 2016 and domiciled in Jersey. The address of its registered office is 22 Grenville Street, St. Helier, Jersey JE4 8PX.

The company's immediate parent undertaking is GS Global Markets, Inc., a company incorporated and domiciled in Delaware, United States of America.

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.

### Note 2.

### **Summary of Significant Accounting Policies**

### **Basis of Preparation**

The company prepares financial statements under U.K. GAAP. These financial statements have been prepared in accordance with FRS 104 'Interim Financial Reporting' (FRS 104) and Article 5 of the Directive 2004/109/EC as amended by Directive 2013/50/EU. These financial statements should be read in conjunction with the 2018 Annual Report, which has been prepared in accordance with FRS 101 'Reduced Disclosure Framework'.

### **Accounting Policies**

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

### Note 3.

# Critical Accounting Estimates and Judgements

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

### Note 4.

### **Net Revenues**

Net revenues include net interest income and non-interest income/(expense). Net interest income primarily relates to interest income from loans to affiliates. Non-interest income/(expense) includes:

- Gains and losses on financial assets and financial liabilities measured mandatorily at fair value through profit or loss (including financial liabilities held for trading) primarily relates to non-interest gains and losses on derivative financial assets and derivative financial liabilities.
- Gains and losses on financial liabilities designated at fair value through profit or loss primarily relates to non-interest gains and losses on other creditors.
- Allocations of net revenues from/(to) affiliates relates to allocations of net revenues from/(to) affiliates for their participation in the company's activities.

The table below presents net revenues.

	Six Months Ended June			
\$ in thousands		2019		2018
Interest income				
Interest income from external counterparties	\$	-	\$	17
Interest income from parent and group				
undertakings	12	25,037	52,881	
Total interest income	12	25,037	52,898	
Interest expense				
Interest expense from external counterparties		(1,370)		(216)
Total interest expense		(1,370)		(216)
Net interest income	123,667		52,682	
Financial assets and financial liabilities measured				
mandatorily at fair value through profit or loss	34	46,933	(64,802)	
Financial liabilities designated at fair value through				
profit or loss	(50	09,452)	12	2,261
Allocations of net revenues from/(to) affiliates	10,660		(111,927)	
Net changes in impairment of financial assets				
measured at amortised cost		379		(871)
Non-interest income/(expense)	(15	51,480)	(5	5,339)
Net revenues	\$ (2	27,813)	\$ (	2,657)

### Note 5.

### **Segment Reporting**

The company is an issuer of securities in a number of European and Asian markets. The proceeds from these securities are onward lent to affiliates on an aggregated basis. As such, the directors manage the company's activities as a single business.

The company believes that a geographic analysis of its unsecured debt securities issued is a meaningful method to evaluate the business environments in which the company operates.

The table below presents the carrying amount of the company's unsecured debt securities issued by geographic region based on the location of the market-making desk and the primary market for the underlying security.

	As	of
	June	December
\$ in thousands	2019	2018
Europe	\$ 5,502,590	\$5,512,231
Asia	5,041,655	3,599,836
Total unsecured debt securities issued	\$10,544,245	\$9,112,067

### Note 6.

### Administrative Expenses

The company incurred administrative expenses of \$67,000 for the six months ended June 2019 and \$89,000 for the six months ended June 2018, which primarily related to professional fees.

#### Note 7.

### Staff Costs

The company has no employees. All persons involved in the company's operations are employed by group undertakings and no costs are borne by the company.

#### Note 8.

### Tax on Loss

The company is domiciled in Jersey and under local laws the standard rate of corporate tax is zero percent. As a result, no provision for income taxes has been made.

### Note 9.

# Derivative Financial Assets and Derivative Financial Liabilities

The table below presents derivative financial assets.

	As	of
	June	December
\$ in thousands	2019	2018
Interest rates	\$392,817	\$220,062
Credit	7,608	4,690
Currencies	17,292	7,412
Equities	146,748	90,625
Total derivative financial assets	\$564,465	\$322,789

The table below presents derivative financial liabilities.

	As of	
	June	December
\$ in thousands	2019	2018
Interest rates	\$265,260	\$121,076
Credit	13,261	10,218
Currencies	78,934	131,453
Equities	171,339	259,612
Total derivative financial liabilities	\$528,794	\$522,359

#### Note 10.

### Debtors

The table below presents debtors balances, all of which are financial assets.

	As	of
	June	December
\$ in thousands	2019	2018
Amounts due within one year		
Amounts due from parent and group u	undertakings:	
Unsecured loans	\$ 799,865	\$ 799,771
Other debtors	396,608	71,591
Total	\$ 1,196,473	\$ 871,362
Amounts due after more than one y	/ear	
Amounts due from parent and group u	undertakings:	
Unsecured loans	\$ 9,723,053	\$8,685,182
Other debtors	46,515	239,889
Total	\$ 9,769,568	\$8,925,071
Total debtors	\$10,966,041	\$9,796,433

In the table above, unsecured loans due within one year and unsecured loans due after more than one year included an allowance for impairment of \$2 million as of June 2019 and \$3 million as of December 2018.

### Note 11.

### **Other Creditors**

The table below presents other creditors, all of which are financial liabilities.

	As of		
	June	December	
\$ in thousands	2019	2018	
Amounts falling due within one year			
Unsecured debt securities issued	\$ 1,039,027	\$ 552,936	
Amounts due to parent and group undertakings:			
Other unsecured creditors	253,951	72,749	
Other creditors and accruals	7,646	5,368	
Total	\$ 1,300,624	\$ 631,053	
Amounts falling due after more than one year			
Unsecured debt securities issued	\$ 9,505,218	\$8,559,131	
Amounts due to parent and group undertakings:			
Unsecured loans	123,044	5,112	
Total	\$ 9,628,262	\$8,564,243	
Total other creditors	\$10,928,886	\$9,195,296	

In the table above, unsecured debt securities issued falling due after more than one year included instruments that are repayable in more than five years of \$6.21 billion as of June 2019 and \$5.56 billion as of December 2018. As of June 2019, these instruments have maturities falling due between 2024 and 2049. Payments on these instruments are typically referenced to underlying financial assets, which are predominantly interest rates, equities, currencies and credit-related.

### **Debt Valuation Adjustment**

The company calculates the fair value of financial liabilities 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 net DVA on such financial liabilities that are designated at fair value through profit or loss and included in debt valuation adjustment in other comprehensive income was a loss of \$300 million for the six months ended June 2019 and a gain of \$150 million for the six months ended June 2018.

The company also made a realised gain of \$17 million in DVA for the first six months ended June 2019 which was transferred from accumulated other comprehensive income to retained earnings. The gain arose upon early redemption of certain debt securities issued that were designated at fair value through profit or loss. These gains/(losses) were not material for the six months ended June 2018.

The cumulative net DVA included in accumulated other comprehensive income was a gain of \$12 million as of June 2019 and a gain of \$330 million as of December 2018.

### Note 12.

### Share Capital

The table below presents share capital.

	Ordinary shares	
Allotted, called up and fully paid	of \$1 each	\$ in thousands
As of December 31, 2018	5,000,001	\$5,000
As of June 30, 2019	5,000,001	\$5,000

### Note 13.

### **Cash and Cash Equivalents**

For the purpose of the statements of cash flows, cash and cash equivalents consists of cash at bank and in hand of \$13 million as of both June 2019 and June 2018.

### Note 14.

# Reconciliation of Cash Flows From Operating Activities

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

	Six Months			
	Ended June			
\$ in thousands	<b>2019</b> 201			
Operating loss	\$ (27,880)	\$ (2,746)		
Adjustments for				
Foreign exchange losses	478	236		
Cash used before changes in				
operating assets and liabilities	(27,402)	(2,510)		
Changes in operating assets				
Increase in derivative financial assets	(241,676)	(150,904)		
Increase in debtors	(1,169,608)	(3,029,127)		
Changes in operating assets	(1,411,284)	(3,180,031)		
Changes in operating liabilities				
Increase in derivative financial liabilities	6,435	92,503		
Increase in other creditors	1,433,372	3,083,637		
Changes in operating liabilities	1,439,807	3,176,140		
Cash generated from/(used in) operations	\$ 1,121	\$ (6,401)		

In the table above, cash generated from/(used in) operations included interest paid of \$3 million for the six months ended June 2019 and \$2 million for the six months ended June 2018, and interest received of \$1 million for the six months ended June 2019 and \$40 million for the six months ended June 2018.

### Note 15.

### **Financial Commitments and Contingencies**

The company had no financial commitments or contingencies outstanding as of both June 2019 and December 2018.

### Note 16.

### **Financial Assets and Financial Liabilities**

### Financial Assets and Financial Liabilities by Category

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

	Financial Assets						
	Mandatorily		A	Amortised			
\$ in thousands	at fair value			cost			Total
As of June 2019	As of June 2019						
Derivative financial assets	\$56	4,465	\$		-	\$	564,465
Debtors	21	2,541	10	,753,50	00	1	0,966,041
Cash at bank and in hand	-			13,262		13,262	
Total financial assets	\$777,006 \$10		0,766,762		\$11,543,768		
As of December 2018							
Derivative financial assets	\$32	2,789	\$		-	\$	322,789
Debtors	24	0,888	g	,555,54	15	9,796,433	
Cash at bank and in hand		-		12,6	19		12,619
Total financial assets	\$56	3,677	\$ 9	,568,16	64	\$1	0,131,841
			Financi	al Liabi	lities		
	Held for	Desig	nated	Amo	rtised		
\$ in thousands	trading	at fair	value		cost		Total
As of June 2019							
Amounts falling due within	one year						
Derivative financial liabilities	\$528,794	\$	-	\$	-	\$	528,794
Other creditors	-	1,03	9,027	26	1,597		1,300,624
Total	528,794	1,03	9,027	26	61,597		1,829,418
Amounts falling due after n	nore than o	one yea	ar				
Other creditors	-	7,38	5,119	2,24	3,143		9,628,262
Total	-	7,38	5,119	2,24	3,143		9,628,262
Total financial liabilities	\$528,794	\$8,42	4,146	\$2,50	04,740	\$1	1,457,680
As of December 2018							
Amounts falling due within	one year						
Derivative financial liabilities	\$522,359	\$	-	\$	-	\$	522,359
Other creditors	-	55	2,936	7	78,117		631,053
Total	522,359		2,936	7	78,117		1,153,412
Amounts falling due after n	nore than o						
Other creditors	-		4,388		29,855		8,564,243
Total	-	,	4,388	,	29,855		8,564,243
Total financial liabilities	\$522,359	\$7,38	7,324	\$1,80	)7,972	\$	9,717,655

In the tables above, derivative financial assets included \$82 million as of June 2019 and \$30 million as of December 2018, and derivative financial liabilities included \$1 million as of June 2019 and \$nil as of December 2018, of derivative instruments designated as hedges.

### Fair Value Hierarchy

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

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

The fair value hierarchy is as follows:

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

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

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

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

### Valuation Techniques and Significant Inputs

**Derivative Instruments.** The company's OTC derivatives 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.

### GOLDMAN SACHS FINANCE CORP INTERNATIONAL LTD Notes to the Financial Statements (Unaudited)

- 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, generally have less price transparency.
- **Currency.** Prices for currency derivatives based on the exchange rates of leading industrialised nations, including those with longer tenors, are generally transparent. The primary difference between the price transparency of developed and emerging market currency derivatives is that emerging markets tend to be observable for contracts with shorter tenors.
- Equity. Price transparency for equity derivatives varies by market and underlier. Options on indices and the common stock of corporates included in major equity indices exhibit the most price transparency. Equity derivatives generally have observable market prices, except for contracts with long tenors or reference prices that differ significantly from current market prices. More complex equity derivatives, such as those sensitive to the correlation between two or more individual stocks, generally have less price transparency.

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

### Level 2 Derivatives

Level 2 derivatives include OTC derivatives for which all significant valuation inputs are corroborated by market evidence. 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.

#### 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 and equity volatilities.

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

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

### Valuation Adjustments

Valuation adjustments are integral to determining the fair value of derivative portfolios and are used to adjust the mid-market valuations produced by derivative pricing models to the appropriate exit price valuation. These adjustments mainly incorporate bid/offer spreads and the cost of liquidity. Marketbased inputs are generally used when calibrating valuation adjustments to market-clearing levels.

**Debtors.** Debtors measured at fair value consist of hybrid financial instruments and are generally valued based on discounted cash flow techniques, which incorporate inputs with reasonable levels of price transparency, and are generally classified in level 2 because the inputs are observable.

The significant inputs to the valuation of such debtors measured at fair value are the amount and timing of expected future cash flows and interest rates. 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. See "Derivative Instruments" above.

**Other Creditors.** Other creditors consists of debt securities issued, which are hybrid financial instruments, and are generally valued based on discounted cash flow techniques, which incorporate inputs with reasonable levels of price transparency, and are generally classified in level 2 because the inputs are observable. Valuation adjustments may be made for liquidity and GS Group's credit quality.

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, and the credit spreads of GS Group. 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. See "Derivative Instruments" above.

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

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

\$ in thousands	Level 1	Level 2		Level 3		Total
As of June 2019						
Financial Assets						
Derivative financial assets	\$ - \$	\$ 527,372	\$	37,093	\$	564,465
Debtors	-	212,541		-		212,541
Total financial assets	\$ - \$	\$ 739,913	\$	37,093	\$	777,006
Financial Liabilities						
Amounts falling due within o	one year					
Derivative financial liabilities	\$ - \$	6 460,986	\$	67,808	\$	528,794
Other creditors	-	791,985		247,042	1	,039,027
Total	-	1,252,971		314,850	1	,567,821
Amounts falling due after me	ore than or	ne year				
Other creditors		5,375,793	2	,009,326	7	7,385,119
Total		5,375,793				,385,119
Total financial liabilities	\$ - \$	6,628,764	\$2	,324,176		3,952,940
Net derivative instruments	\$ - \$	66,386	¢	(30,715)	\$	35,671
Net derivative moti unemo	4 – 4	00,300	φ	(30,713)	φ	33,071
As of December 2018				<u> </u>		
As of December 2018 Financial Assets						
	\$ - \$	\$ 316,044	\$	6,745	\$	322,789
Financial Assets	\$ - \$	316,044 240,888	\$	6,745	\$	322,789 240,888
Financial Assets Derivative financial assets	_	,	\$	6,745 _ 6,745	\$	,
Financial Assets Derivative financial assets Debtors	_	240,888	•	-	•	240,888
Financial Assets Derivative financial assets Debtors	_	240,888	•	-	•	240,888
Financial Assets Derivative financial assets Debtors Total financial assets	\$ - \$	240,888	•	-	•	240,888
Financial Assets Derivative financial assets Debtors Total financial assets Financial Liabilities	\$\$	240,888	•	-	•	240,888
Financial Assets Derivative financial assets Debtors Total financial assets Financial Liabilities Amounts falling due within o	\$\$	240,888 556,932	\$	6,745	\$	240,888 563,677
Financial Assets Derivative financial assets Debtors Total financial assets Financial Liabilities Amounts falling due within of Derivative financial liabilities	\$\$	240,888 556,932 370,005	\$		\$	240,888 563,677 522,359
Financial Assets Derivative financial assets Debtors Total financial assets Financial Liabilities Amounts falling due within of Derivative financial liabilities Other creditors	- \$ \$ - \$ one year \$ - \$ - -	240,888 556,932 370,005 440,625 810,630	\$	6,745 152,354 112,311	\$	240,888 563,677 522,359 552,936
Financial Assets Derivative financial assets Debtors Total financial assets Financial Liabilities Amounts falling due within of Derivative financial liabilities Other creditors Total	\$ - \$ one year \$ - \$ - - ore than or	240,888 556,932 370,005 440,625 810,630	\$	6,745 152,354 112,311	\$ \$	240,888 563,677 522,359 552,936
Financial Assets         Derivative financial assets         Debtors         Total financial assets         Financial Liabilities         Amounts falling due within of Derivative financial liabilities         Other creditors         Total         Amounts falling due after model	\$ - \$ one year \$ - \$ - ore than or -	240,888 556,932 370,005 440,625 810,630 he year	\$	6,745 152,354 112,311 264,665	\$	240,888 563,677 522,359 552,936 ,075,295
Financial Assets         Derivative financial assets         Debtors         Total financial assets         Financial Liabilities         Amounts falling due within of         Other creditors         Total         Amounts falling due after mo         Other creditors         Other creditors	> - \$ > - \$ > - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	240,888 5 556,932 5 370,005 440,625 810,630 1e year 4,885,288	\$		\$	240,888 563,677 522,359 552,936 ,075,295 5,834,388
Financial Assets Derivative financial assets Debtors Total financial assets Financial Liabilities Amounts falling due within of Derivative financial liabilities Other creditors Total Amounts falling due after mo Other creditors Total	> - \$ > - \$ > - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	240,888 5 556,932 5 370,005 440,625 810,630 re year 4,885,288 4,885,288	\$		\$	240,888 563,677 522,359 552,936 ,075,295 5,834,388 5,834,388

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

The company's level 3 debt securities issued are economically hedged with OTC derivatives. The significant unobservable inputs used in level 3 fair value measurements have not been disclosed as the net effect of the inputs to the measurements of level 3 financial assets and financial liabilities was not material to the company's profit or loss, or other comprehensive income for both the six months ended June 2019 and June 2018, and net assets as of both June 2019 and December 2018.

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

The fair value of financial assets and financial liabilities may be determined in whole or part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument or based on available observable market data and changing these assumptions will change the resultant estimate of fair value. For those financial assets and financial liabilities that are valued using unobservable inputs, the net potential impact of using reasonable possible alternative assumptions for the valuations, including significant unobservable inputs, was not material as of both June 2019 and June 2018, as the company's level 3 debt securities issued are economically hedged with OTC derivatives.

### Level 3 Rollforward

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

	Six Months				
	Ended June				
\$ in thousands		2018			
Total financial assets					
Beginning balance	\$	6,745	\$	1,818	
Gains/(losses)		32,958		(1,560)	
Purchases		1,028		-	
Settlements		(14,198)		209	
Transfers into level 3		12,572		-	
Transfers out of level 3		(2,012)		(201)	
Ending balance	\$	37,093	\$	266	
Total financial liabilities					
Beginning balance	\$ (2	2,213,765)	\$ (3	337,128)	
Gains/(losses)		(168,846)		9,959	
Sales/Issuances		(756,168)		(564,750)	
Settlements		632,985		115,043	
Transfers into level 3		(49,935)		-	
Transfers out of level 3		231,553		79,566	
Ending balance	<b>\$ (2,324,176)</b> \$ (697,37			697,310)	

In the table above:

- Financial assets relate to derivative financial assets.
- 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 as 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, while decreases are shown as positive amounts.

- Transfers between levels of the fair value hierarchy are recognised at the beginning of the reporting period in which they occur. Accordingly, the tables do not include gains or losses for level 3 financial assets and financial liabilities that were transferred out of level 3 prior to the end of the period.
- Level 3 financial liabilities are economically hedged with level 2 and level 3 financial assets and financial liabilities. Accordingly, level 3 gains or losses that are reported in the table below for a particular class of financial liability can be partially offset by gains or losses attributable to level 2 or level 3 in a different class of financial asset or financial liability.
- The net gains and losses on level 3 financial assets for the six months ended June 2019 and six months ended June 2018 are reported in "Net revenues" in the profit and loss account.
- The net losses on level 3 financial liabilities of \$169 million for the six months ended June 2019 included losses of \$90 million reported in "Debt valuation adjustment" in the statements of comprehensive income and losses of \$79 million reported in "Net revenues" in the profit and loss account. The net gains on level 3 financial liabilities of \$10 million for the six months ended June 2018 included gains of \$16 million reported in "Debt valuation adjustment" in the statements of comprehensive income and losses of \$6 million reported in "Net revenues" in the profit and loss account.

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

	Six Months		
	Ended June		
\$ in thousands	2019	2018	
Derivative financial liabilities			
Beginning balance	\$ (152,354)	\$ (29,417)	
Gains/(losses)	77,947	(14,003)	
Sales	(13,102)	(8,240)	
Settlements	28,411	11,504	
Transfers into level 3	(26,233)	-	
Transfers out of level 3	17,523	1,668	
Ending balance	\$ (67,808)	\$ (38,488)	
Other creditors			
Beginning balance	\$(2,061,411)	\$(307,711)	
Gains/(losses)	(246,793)	23,962	
Issuances	(743,066)	(556,510)	
Settlements	604,574	103,539	
Transfers into level 3	(23,702)	-	
Transfers out of level 3	214,030	77,898	
Ending balance	\$(2,256,368)	\$(658,822)	

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

**Six Months Ended June 2019.** Transfers into level 3 for financial assets and liabilities primarily reflected transfers of certain equity products from level 2, principally due to reduced transparency of certain equity volatility and correlation inputs as a result of a lack of market evidence.

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

**Six Months Ended June 2018.** Transfers out of level 3 financial liabilities primarily reflected transfers of certain equity products to level 2, principally due to unobservable volatility and correlation inputs no longer being significant to the valuation of these products.

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

The company had financial assets that are not measured at fair value of \$10.77 billion as of June 2019 and \$9.57 billion as of December 2018, which predominately relate to intercompany loans. The interest rates of these loans are variable in nature and approximate prevailing market interest rates for instruments with similar terms and characteristics. As such, their carrying amounts in the balance sheet are a reasonable approximation of fair value.

The company had financial liabilities that are not measured at fair value of \$2.50 billion as of June 2019 and \$1.81 billion as of December 2018. These predominantly relate to fixed-rate long-term borrowings of \$2.12 billion as of June 2019 and \$1.72 billion as of December 2018, for which the fair value was \$2.06 billion as of June 2019 and \$1.57 billion as of December 2018.