



#### GOLDMAN, SACHS & CO. WERTPAPIER GMBH

(Incorporated with limited liability in Germany)

#### as Issuer

#### GOLDMAN SACHS FINANCE CORP INTERNATIONAL LTD

(Incorporated with limited liability in Jersey)

#### as Issuer

#### GOLDMAN SACHS INTERNATIONAL

(Incorporated with unlimited liability in England)

as Issuer and, in respect of certain Securities only, as Guarantor

## THE GOLDMAN SACHS GROUP, INC.

(A corporation organised under the laws of the State of Delaware)

in respect of certain Securities only, as Guarantor

# SERIES P PROGRAMME FOR THE ISSUANCE OF WARRANTS, NOTES AND CERTIFICATES

#### **This Prospectus Supplement**

This prospectus supplement (the "Prospectus Supplement") to the base prospectus dated 18 July 2019 prepared by Goldman, Sachs & Co. Wertpapier GmbH ("GSW") as issuer, Goldman Sachs Finance Corp International Ltd ("GSFCI") as issuer, Goldman Sachs International ("GSI") as issuer and as guarantor in respect of certain Securities only and The Goldman Sachs Group, Inc. ("GSG") as guarantor in respect of certain Securities only (the "Original Base Prospectus") under their Series P programme for the issuance of warrants, notes and certificates with respect to the securities (the "Programme"), constitutes a supplement to the base prospectus for the purposes of Article 13 of Chapter 1 of Part II of the Luxembourg Law on Prospectuses for Securities dated 10 July 2005, as amended on 3 July 2012, 21 December 2012 and 10 May 2016, which remains applicable pursuant to Article 64 of the Luxembourg Law dated 16 July 2019 on prospectuses for securities (the "Luxembourg Law"), and should be read in conjunction therewith and with Prospectus Supplement No. 1 to the Original Base Prospectus, dated 14 August 2019, Prospectus Supplement No. 2 to the Original Base Prospectus, dated 19 September 2019, Prospectus Supplement No. 3 to the Original Base Prospectus, dated 3 October 2019, Prospectus Supplement No. 4 to the Original Base Prospectus, dated 22 October 2019, Prospectus Supplement No. 5 to the Original Base Prospectus, dated 13 November 2019, Prospectus Supplement No. 6 to the Original Base Prospectus, dated 8 January 2020, Prospectus Supplement No. 7 to the Original Base Prospectus, dated 10 February 2020 and Prospectus Supplement No. 8 to the Original Base Prospectus, dated 9 March 2020 (the Original Base Prospectus as so supplemented, the "Base Prospectus"). On 18 July 2019, the Commission de Surveillance du Secteur Financier (the "CSSF") approved the Original Base Prospectus for the purposes of Article 7 of the Luxembourg Law.

Terms defined in the Base Prospectus have the same meaning when used in this Prospectus Supplement unless otherwise defined herein. This Prospectus Supplement shall form part of and be read in conjunction with the Base Prospectus.

# Right of withdrawal

In accordance with Article 13 paragraph 2 of the Luxembourg Law, investors who have already agreed to purchase or subscribe for the securities before this Prospectus Supplement is published have the right exercisable until 9 April 2020, which is two working days after the publication of this Prospectus Supplement, to withdraw their acceptances.

## **Purpose of this Prospectus Supplement**

The purpose of this Prospectus Supplement is to (a) incorporate by reference GSI's 2019 Annual Report (as defined below), and (b) make certain changes to the information in the "Summary", "Risk Factors", "Documents Incorporated by Reference", "General Terms and Conditions of the Instruments", "General Terms and Conditions of the Notes", "Coupon Payout Conditions", "Autocall Payout Conditions", "Payout Conditions", "Index Linked Conditions", "Form of Final Terms (Instruments)", "Form of Final Terms (Notes)", "Goldman Sachs International" and "General Information" sections of the Base Prospectus.

This Prospectus Supplement and the documents incorporated by reference into this Prospectus Supplement will be available on the website of the Luxembourg Stock Exchange at <a href="https://www.bourse.lu">www.bourse.lu</a>.

## Information being supplemented

Incorporation by reference

This Prospectus Supplement supplements the Base Prospectus by incorporating by reference the Annual Report for the twelve months ended 30 November 2019 of Goldman Sachs International ("GSI's 2019 Annual Report"), containing, in Part II, the Directors' Report and Audited Financial Statements of GSI for the period ended 30 November 2019.

A copy of GSI's 2019 Annual Report has been filed with the CSSF in its capacity as competent authority under the Luxembourg Law.

GSI's 2019 Annual Report is incorporated by reference into, and forms part of, this Prospectus Supplement, and the information contained in this Prospectus Supplement, GSI's 2019 Annual Report shall be deemed to update and, where applicable, supersede any information contained in the Base Prospectus, or any documents incorporated by reference therein.

#### Amendments to the Summary

The Summary, as supplemented prior to this Prospectus Supplement, is amended and supplemented as follows:

(a) The paragraphs relating to GSI in Element B.12 (*Selected historical key financial information of the Issuer*), on pages 3 to 4 of the Original Base Prospectus shall be deleted in their entirety and replaced with the following:

"B.12	Selected historical key financial information of the	[The following table shows selected key historical financial information in relation to GSI:				
	Issuer		As at and for the period ended (audited) <sup>1</sup>			
		(in USD millions)	30 November 2019	30 November 2018		
		Operating profit	2,656	3,259		
		Profit before taxation	2,426	3,030		
		Profit for the financial period	1,802	2,198		
		-	As at (	audited)		
		(in USD millions)	30 November 2019	30 November 2018		
		Fixed assets	409	315		
		Current assets	1,040,845	886,652		
		Total shareholders' funds	34,248	33,917]		
		During the period ended 30 November 2018, GSI changed its accounting reference end date from December 31 to November 30 to conform to the period used by GSI for U.S. tax reporting purposes. All references to November 2018 refer to the eleven months period ended, or the date, as the context requires, 30 November 2018."  [There has been no material adverse change in the prospects of GSI since 30 November 2019.]				
		[Not applicable: there has been no significant change in the financial or trading position of GSI since 30 November 2019.]"				

(b) The paragraphs relating to GSI in Element B.19 (B.12) (Selected historical key financial information of the Guarantor), on page 8 of the Original Base Prospectus shall be deleted in their entirety and replaced with the following:

"B.19 (B.12)	Selected historical key financial information of the	[The following table shows selected key historical financial information in relatito GSI:					
	Guarantor		As at and for the per	riod ended (audited) <sup>2</sup>			
		(in USD millions)	<b>30 November 2019</b>	30 November 2018			
		Operating profit	2,656	3,259			
		Profit before taxation	2,426	3,030			
		Profit for the financial period	1,802	2,198			
			As at (a	As at (audited)			
		(in USD millions)	<b>30 November 2019</b>	30 November 2018			
		Fixed assets	409	315			
		Current assets	1,040,845	886,652			
		Total shareholders' funds	34,248	33,917			
		During the period ended 30 November 2018, GSI changed its accounting reference end date from December 31 to November 30 to conform to the period used by GSI for U.S. tax reporting purposes. All references to November 2018 refer to the eleven months period ended, or the date, as the context requires, 30 November 2018."					
		There has been no material adverse change in the prospects of GSI since 30 November 2019.					
		Not applicable: there has been no significant change in the financial or trading position of GSI since 30 November 2019.]"					

(c) The following paragraph shall be inserted immediately below the formula "[*If Memory Coupon is not applicable, insert:* (CA x CV)]" in Element C.18 on page 21 of the Original Base Prospectus:

"C.18	Return on	[If Simultaneous Coupon Conditions is applicable, insert: , provided that if more
	Securities <sup>1</sup>	than one Coupon Payment Event has occurred on Coupon Observation Dates that
		fall on the same date, then only one Coupon Amount shall be payable and such
		amount will be [equal to] [●] [the] [sum] [highest] [lowest] [arithmetic mean] [of
		the Coupon Amounts corresponding to such Coupon Observation Dates].]"

(d) The following sentence shall be inserted immediately after the sentence "[If Daily Autocall Event Amount is not applicable, insert: the Autocall Event Amount corresponding to such Autocall Observation Date on the [immediately following] Autocall Payment Date [corresponding to such Autocall Observation Date]" in Element C.18 on page 28 of the Original Base Prospectus:

"C.18	Return on	[If Simultaneous Autocall Conditions is applicable, insert: , provided that if more
	Securities <sup>1</sup>	than one Autocall Event has occurred on Autocall Observation Dates that fall on the
		same date, then only one Autocall Event Amount shall be payable and such amount
		will be [equal to] [•] [the] [sum] [highest] [lowest] [arithmetic mean] [of the
		Autocall Event Amounts corresponding to such Autocall Observation Dates].]"

(e) The following definition of "Reference Price" in Element C.18 on page 31 of the Original Base Prospectus shall be deleted in its entirety and replaced with the following:

"C.18	Return on	•	[Reference Price: [the closing share price of the Share] [or] [the [closing
	Securities <sup>1</sup>		index level] [strategy value] of the Index] [or] [the closing level of the
			Commodity Index] [or] [the commodity reference price of the Commodity]

[or] [the Exchange Rate of the FX Rate] [or] [the net asset value of the Fund] [or] [the Final Reference Price of the Index-Linked Derivatives Contract] for the relevant date.]"
Contract] for the relevant date.]

(f) The final paragraph of the definition of "Autocall Reference Value" in Element C.18 on page 31 of the Original Base Prospectus shall be deleted and replaced with the following:

"C.18	Return on Securities <sup>1</sup>	[If Autocall Asset Performance applies, insert: [In respect of an Underlying Asset and [the] [each] Autocall Observation Date[(s) scheduled to fall [on [●]] [in the period commencing on, and including, [●] and ending on, and including, [●]],] the Autocall Asset Performance of [the] [such] Underlying
		Asset for the relevant Autocall Observation Date.]"

(g) The following new definition "Asset FX Rate" shall be inserted in Element C.18 immediately after the definition of "Asset Performance Rank" on page 36 of the Original Base Prospectus:

"C.18	Return on	•	[Asset FX Rate: in respect of any relevant day and the Asset Currency of
	Securities <sup>1</sup>		an Underlying Asset, the [official] [fixing] [mid closing] [spot] [mid] [fixing] rate of Base Currency/Asset Currency exchange rate, expressed as
			an amount of Asset Currency per unit of Base Currency, reported by [•] on
			the [relevant] [Reuters Page] [Bloomberg Screen] [•] at approximately
			[•].]"

(h) The following definition of "Final Reference Date" in Element C.18 on page 37 of the Original Base Prospectus shall be deleted and replaced with the following:

"C.18	Return on	•	[Final Reference Date: [•] [the final settlement day of the [relevant]
	Securities <sup>1</sup>		Index-Linked Derivatives Contract] [the [•] expected [common] scheduled
			trading day preceding [[•]] [the Scheduled Maturity Date] [(following any
			adjustment if such date falls on a non-business day)][, subject to adjustment
			in accordance with the terms and conditions]. [The Final Reference Date is
			expected to be [●] as at the date of this Summary].]"

(i) The following new definition "Final Reference Price" shall be inserted in Element C.18 immediately after the definition of "Final Reference Date" on page 37 of the Original Base Prospectus:

"C.18	Return	on	•	[Final Reference Price: If the final official settlement price of the Index-
	Securities <sup>1</sup>			Linked Derivatives Contract (howsoever described under the rules of the
				Derivatives Exchange or its clearing house) for such day (the "Final
				Settlement Price") is published by the Derivatives Exchange on the Final
				Reference Date, the Final Settlement Price, or, if the Final Settlement Price
				is not published by the Derivatives Exchange on the Final Reference Date,
				but the official settlement price of the Index-Linked Derivatives Contract
				(howsoever described under the rules of the Derivatives Exchange or its
				clearing house) in respect of the Final Reference Date (the "Daily
				Settlement Price") is published by the Derivatives Exchange on the Final
				Reference Date, such Daily Settlement Price, provided that if neither the
				Final Settlement Price nor the Daily Settlement Price in respect of the Final
				Reference Date is published on the Final Reference Date, the official
				closing level of the Index on such day [multiplied by the Index Multiplier]
				shall be deemed to be the Final Reference Price.]"

(j) The following new definition "Index Multiplier" shall be inserted in Element C.18 immediately after the definition of "IIA" on page 37 of the Original Base Prospectus:

"C.18	Return on	•	[Index Multiplier: an amount determined by the Calculation Agent in good
	Securities <sup>1</sup>		faith and in a commercially reasonable manner intended to reflect the
			realised dividend yield of the Index as of the relevant date.]"

(k) Element C.19 on page 49 of the Original Base Prospectus shall be deleted in its entirety and replaced with the following:

"C.19	Exercise price/final reference price of the underlying	[Insert Element C.19 if Annex XII is applicable]  [For Securities linked to an Underlying Asset, insert: [The] [arithmetic mean of] [the] [closing share price of [the] [each] Share] / [closing index level of [the] [each] Index] / [closing level of [the] [each] Commodity Index] / [commodity reference price of [the] [each] Commodity] / [exchange rate of [the] [each] FX Rate] / [net asset value of the Fund] / [Final Reference Price of [the] [each] Index-Linked Derivatives Contract] will be determined on [insert Final Reference Date or Averaging Dates] [the Final Averaging Dates / Final Pricing Dates / the Final Reference Date][, subject to adjustment in accordance with the terms and conditions] / [the level of the Inflation Index published for [insert Final Reference Month].
		[For EIS Notes, insert: The fair market value of the Preference Share (Preference Share ValueFinal) will be determined on the Valuation Date.]"

(l) The Underlying Asset Table in Element C.20 on page 49 of the Original Base Prospectus shall be deleted:

"C.20	The underlying Asset[s]	[Underlying Asset]	/ Reuters / ISIN (Insert for Share or	[Exchange] [Trading Facility/ [FX Price Source][Derivatives Exchange] [Index Sponsor]		[Asset Currency]		[Asset Initial Price]	[Initial Value]	[Weighting] [Variable Floor Level]
		[insert name of underlying asset]	[insert]	[insert]	[insert]	[insert]	[insert]			[insert]

(m) The following new paragraph shall be inserted in Element D.6 immediately above the drafting note "[For Proprietary Indices, insert:" on page 57 of the Original Base Prospectus:

"D.6	Key risks that are	[If Securities are linked to an Index-Linked Derivatives Contract, insert:			
specific to the securities		• As the return on the Securities is linked to the performance of one or more index-linked derivatives contracts, the expectations of dealers in index-linked derivatives contracts of the level of the relevant Index on the date(s) on which the settlement amount of an index-linked derivatives contract is determined may also have an impact on the price of an index-linked derivatives contract on the Index and you may therefore receive a lower return on the Securities than you would have received from investing in securities directly linked to the relevant Index.			
		• [As the settlement amount of the index-linked derivatives contract(s) to which the Securities are linked is a multiple of the difference between the relevant level of the relevant Index on a future date and the strike or forward price, a relatively small change in the level of such Index may result in a proportionately much larger change in the price of the index-linked derivatives contract(s) contract and this may negatively impact the return on the Securities.]]"			

#### Amendments to the Base Prospectus

The Base Prospectus, as supplemented prior to this Prospectus Supplement, is amended and supplemented as follows:

#### 1. Amendments to the section entitled "Risk Factors"

The information in the section entitled "Risk Factors" is amended and supplemented as follows:

(a) the risk factors in sub-section 2 entitled "Risks relating to GSI", on pages 68 to 82 of the Original Base Prospectus shall be deleted in its entirety and replaced with the following:

## "2. Risks relating to GSI

GSI 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 GSI's businesses.

#### (i) Risks relating to economic and market conditions

GSI'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.

GSI'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 GSI'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 GSI'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.

GSI'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.

#### (ii) Risks relating to regulation

As a participant in the financial services industry and a subsidiary of a systemically important financial institution, GSI is subject to extensive regulation, principally in the UK, and the European Union ("EU") more generally, but also in the U.S. as a subsidiary of GSG and in certain other jurisdictions. GSI 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, GSI'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 GSI's compliance with laws and regulations, GSI 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 GSI's profitability.

In addition to the impact on the scope and profitability of GSI'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 GSI's senior leaders and that of a large number of dedicated compliance and other reporting and operational personnel, all of which may negatively impact GSI's profitability.

If there are new laws or regulations or changes in the enforcement of existing laws or regulations applicable to GSI's businesses or those of GSI'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 EU 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 GSI or GSG, compliance with these new laws and regulations, or changes in the enforcement of existing laws or regulations, could adversely affect GSI'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 GSI's businesses.

These developments could impact GSI'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 GSI 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 GSI'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 GSI's profitability and competitive position, particularly if these requirements do not apply, or do not apply equally, to GSI's competitors or are not implemented uniformly across jurisdictions.

GSI 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 GSI to liability and/or reputational damage. As new privacy-related laws and regulations are implemented, the time and resources needed for GSI to comply with such laws and regulations, as well as GSI's potential liability for non-compliance and reporting obligations in the case of data breaches, may significantly increase.

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

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 GSI has fiduciary obligations in connection with acting as a financial adviser, 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.

## (iii) Risk relating to Brexit

On January 31, 2020, the UK left the EU. GSI expects considerable change in the regulatory framework that will govern transactions and business undertaken by GSI in the EU. As a result, GSI 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, GSI will be subject to additional regulation and supervision in those jurisdictions.

GSI is incorporated and headquartered in the UK, and currently benefits from non-discriminatory access to EU clients and infrastructure based on EU treaties and EU legislation, including arrangements for cross-border "passporting" and the establishment of EU branches. The EU and the UK Parliament have ratified the Withdrawal Agreement, which provides for a transition period for the UK and the EU 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 UK and the EU beyond that date is uncertain. At the end of the transition period, firms based in the UK are expected to lose their existing access arrangements to the EU markets.

As necessary, certain client relationships and activities currently undertaken by GSI may be transitioned to other EU subsidiaries of GSG, which may result in a decline in GSI'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 UK, and may create such environments in current EU 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 GSI's business.

## (iv) Risks relating to market volatility

GSI's businesses have been and may be adversely affected by declining asset values. This is particularly true for those businesses in which GSI has net "long" positions, receives fees based on the value of assets managed, or receives or posts collateral. Many of GSI'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 GSI 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, GSI invests in similar asset classes. Substantially all of GSI'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 GSI 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 GSI'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 GSI's ability to limit losses in such positions and the difficulty in valuing assets may negatively affect GSI's capital, liquidity or leverage ratios, increase its funding costs and generally require maintaining additional capital.

In GSI's exchange-based market-making activities, GSI 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 GSI 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 GSI is the party providing collateral, this can increase costs and reduce profitability and if GSI 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 timeconsuming 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 GSI forecloses on collateral, sudden declines in the value or liquidity of the collateral may, despite credit monitoring, overcollateralisation, the ability to call for additional collateral or the ability to force repayment of the underlying obligation, result in significant losses to GSI, especially where there is a single type of collateral supporting the obligation. In addition, GSI 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.

## (v) Risks relating to liquidity

Liquidity is essential to GSI's businesses. It is of critical importance to GSI, as most of the failures of financial institutions have occurred in large part due to insufficient liquidity. GSI's liquidity may be impaired by an inability to access secured and/or unsecured debt markets, an inability to access funds from GSG 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 GSI may be unable to control, such as a general market disruption or an operational problem that affects third parties or GSI or its affiliates or even by the perception amongst market participants that GSI, or other market participants, are experiencing greater liquidity risk.

GSI employs structured products to benefit its clients and hedge its own risks. The financial instruments that GSI 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. GSI'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 GSI's positions.

Further, GSI'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 GSI interacts may exercise set-off rights or the right to require additional collateral, including in difficult market conditions, which could further impair GSI's liquidity.

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

GSI's cost of obtaining long-term unsecured funding is directly related to both the credit spreads of GSI and GSG. Increases in the credit spreads of GSI and/or GSG 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 GSI and/or GSG are also influenced by market perceptions of its and/or GSG's creditworthiness and movements in the costs to purchasers of credit default swaps referenced to GSG'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 GSI'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.

## (vi) Risks relating to resolution and recovery planning

The circumstances in which a resolution authority would exercise its "bail-in" powers to recapitalise 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 GSI, such exercise would likely have a material adverse effect on the value of debt investments in GSI, including a potential loss of some or all of such investments.

#### (vii) Risks related to credit markets

Widening credit spreads for GSI or GSG, as well as significant declines in the availability of credit, have in the past adversely affected GSI's ability to borrow on a secured and unsecured basis and may do so in the future. GSI obtains the majority of its unsecured funding indirectly from GSG, 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. GSI 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 GSI's available funding is limited or GSI 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 GSI's financial advisory and underwriting businesses.

GSI'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.

# (viii) Risks relating to 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 GSI's results of operations in a given period. Moreover, because of concentration of risk, GSI 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, GSI 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 EU. A failure or downgrade of, or default by, such entities could negatively impact GSI's businesses, perhaps materially, and the systems by which GSI 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 GSI's concentration of risk with respect to these entities. While GSI's activities expose it to many different industries, counterparties and countries, GSI 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.

#### (ix) Risks relating to credit quality

GSI 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 GSI 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 GSI.

GSI 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 GSI,

including a deterioration in the value of collateral posted by third parties to secure their obligations to GSI under derivatives contracts and loan agreements, could result in losses and/or adversely affect GSI's ability to rehypothecate or otherwise use those securities or obligations for liquidity purposes.

A significant downgrade in the credit ratings of GSI's counterparties could also have a negative impact on GSI's results. While in many cases GSI is permitted to require additional collateral from counterparties that experience financial difficulty, disputes may arise as to the amount of collateral GSI is entitled to receive and the value of pledged assets. The termination of contracts and the foreclosure on collateral may subject GSI 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.

## (x) Risks relating to composition of client base

GSI's client base is not the same as that of its major competitors. GSI'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 GSI's businesses underperforming relative to similar businesses of a competitor if its businesses have a higher concentration of clients in such industries or markets.

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

## (xi) Risks relating to derivative transactions

GSI 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 GSI deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, GSI 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 GSI 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 GSI.

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"), GSI may not be able to exercise termination rights and other remedies against counterparties and, as this new regime has not yet been tested, GSI 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 GSI'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, GSI 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 GSI'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 over-the-counter ("OTC") derivatives, or a market shift toward standardised derivatives, could reduce the risk associated with these transactions, but under certain circumstances could also limit GSI's ability to develop derivatives that best suit the needs of clients and to hedge its own risks, and could adversely affect GSI's profitability and increase credit exposure to central clearing platforms.

#### (xii) Risks relating to operational infrastructure

GSI'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 GSI'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 GSI 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 GSI's employees and the operation of GSI'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 GSI's systems and platforms and GSI's reliance on cloud technologies is growing. Service disruptions may lead to delays in accessing, or the loss of, data that is important to GSI's businesses and may hinder GSI's clients' access to GSI'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.

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. GSI may be, or may become, exposed to risks related to distributed ledger technology through GSI's facilitation of clients' activities involving financial products linked to distributed ledger technology, such as blockchain or cryptocurrencies, GSI'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, GSI 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, GSI will increasingly face the risk of operational failure or significant operational delay with respect to clients' systems.

Despite GSI's resiliency plans and facilities, GSI's ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports its businesses and the communities where GSI is located. This may include a disruption involving electrical, satellite, undersea cable or other communications, internet, transportation or other facilities used by GSI, its employees or third parties with which GSI conducts business, including cloud service providers. These disruptions may occur as a result of events that affect only GSI'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 GSI seeks to diversify its third-party vendors to increase its resiliency, GSI is also exposed to the risk that a disruption or other information technology event at a common service provider to GSI's vendors could impede their ability to provide products or services to GSI. GSI may not be able to effectively monitor or mitigate operational risks relating to its vendors' use of common service providers.

## (xiii) Risks relating to cyber security

GSI 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 GSI's communication from devices GSI 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, GSI 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 GSI's businesses.

Despite GSI'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 GSI's office or induce employees, clients or other users of GSI's systems to disclose sensitive information or provide access to GSI's data or that of its clients, and these types of risks may be difficult to detect or prevent.

Although GSI 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 GSI's vendors and other events that could have a security impact. Due to the complexity and interconnectedness of GSI's systems, the process of enhancing protective measures can itself create a risk of systems disruptions and security issues. In addition, protective measures that GSI 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.

If one or more of such events occur, this potentially could jeopardise GSI or its clients' or counterparties' confidential and other information processed, stored in or transmitted through GSI's computer systems and networks, or otherwise cause interruptions or malfunctions in GSI's, operations or those of its clients', its counterparties' or third parties', which could impact their ability to transact with GSI 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 GSI to obtain full and reliable information about the extent, amount and type of information compromised. During the course of an investigation, GSI 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 GSI's business, results of operations and reputation.

GSI 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 GSI 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. GSI'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 GSI'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 GSI's control, and the failure by mobile technology and cloud service providers to adequately safeguard their systems and prevent cyber attacks could disrupt GSI'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.

GSI routinely transmits and receives personal, confidential and proprietary information by email and other electronic means. GSI 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.

#### (xiv) Risks relating to risk management

GSI 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. GSI'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 GSI 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, GSI 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 GSI 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 GSI'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 GSI's. In these and other cases, it may be difficult to reduce GSI'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.

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 GSI 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, GSI 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, GSI 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 GSI to control the risk exposures relating to these investments.

Prudent risk management, as well as regulatory restrictions, may cause GSI 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.

## (xv) Risks relating to new business initiatives

GSI 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 GSI'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 GSI's traditional client and counterparty base and expose it to new asset classes and new markets. For example, GSI continues to transact business and invest in new regions, including a wide range of emerging and growth markets.

New business initiatives expose GSI 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 GSI 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.

## (xvi) Risks relating to operating in multiple jurisdictions

In conducting GSI's businesses and maintaining and supporting its global operations, GSI 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 EU 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 GSI 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 GSI 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 GSI'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 GSI and its personnel not only to civil actions but also criminal actions. GSI is also subject to the enhanced risk that transactions it structures might not be legally enforceable in all cases.

While business and other practices throughout the world differ, GSI 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 UK Bribery Act. While GSI 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 GSI deals with, greatly increases the risk that GSI 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 GSI 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.

## (xvii) Risks relating to conflicts of interest

A failure to appropriately identify and address potential conflicts of interest could adversely affect GSI's businesses. Due to the broad scope of The Goldman Sachs Group's businesses and client base, GSI regularly addresses potential conflicts of interest, including situations where services to a particular client or The Goldman Sachs 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 The Goldman Sachs Group and situations where it may be a creditor of an entity with which The Goldman Sachs 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 GSI's reputation, which is one of its most important assets, could be damaged and the willingness of clients to enter into transactions with GSI 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, GSG'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.

# (xviii) Risks relating to competition

To the extent GSI 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 GSI'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 GSI's competitors, could impact its ability to compete effectively.

Pricing and other competitive pressures in GSI'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 GSI has experienced, GSI has extended and priced credit at levels that may not always fully compensate it for the risks taken.

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 GSI 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 GSI to large fines and settlements, and potentially significant penalties, including treble damages.

## (xix) Risks relating to changes in underliers

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

Many of the products that GSI 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, GSI 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 GSI 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 GSI'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 GSI, amounts paid on securities GSI has issued, amounts received and paid on derivative instruments GSI 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, GSI's ability to effectively use derivative instruments to manage risk, or the availability or cost of GSI's floating-rate funding and its exposure to fluctuations in interest rates.

#### (xx) Risks relating to personnel

GSI's businesses may be adversely affected if it is unable to hire and retain qualified employees. GSI's performance is largely dependent on the talents and efforts of highly skilled people; therefore, GSI'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 GSI'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 GSI 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 Goldman Sachs Group's profitability, or in the outlook for its future profitability, as well as regulatory limitations on compensation levels and terms, can negatively impact GSI'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. GSI has experienced increased competition in hiring and retaining employees to address the demands of new regulatory requirements and GSI's technology initiatives. This is also the case in emerging and growth markets, where GSI is often competing for qualified employees with entities that have a significantly greater presence or more extensive experience in the region.

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

GSI's compensation practices are subject to review by, and the standards of, the Prudential Regulation Authority (the "**PRA**") and the Financial Conduct Authority (the "**FCA**"). As a large financial institution, GSI 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 GSI to alter compensation practices in ways that could adversely affect its ability to attract and retain talented employees.

#### (xxi) Risks relating to negative publicity

The financial services industry generally and GSI's businesses in particular have been subject to negative publicity. GSI'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.

#### (xxii) Risks relating to legal liability

Substantial civil or criminal liability or significant regulatory action against GSI could have material adverse financial effects or cause significant reputational harm, which in turn could seriously harm business prospects. GSI 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. GSI 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 GSI'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 GSI 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.

GSI is subject to laws and regulations worldwide, including the U.S. Foreign Corrupt Practices Act and the UK 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 GSI's activities and damage to its reputation.

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

#### (xxiii) Risks relating to 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 GSI's ability to manage its businesses and result in losses.

#### (xxiv) Risks relating to climate change

Climate change concerns could disrupt GSI's business, affect client activity levels and creditworthiness and damage GSI's reputation. Climate change may cause extreme weather events that disrupt operations at one or more of GSI'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, GSI's reputation may be damaged as a result of its involvement, or its clients' involvement, in certain industries or projects associated with climate change."

# 2. Amendments to the section entitled "Documents Incorporated by Reference"

The information in the section entitled "Documents Incorporated by Reference" is amended and supplemented by:

(a) deleting sub-section 1 entitled "Goldman Sachs International" on page 147 of the Original Base Prospectus in its entirety and replacing it with the following:

## "1. Goldman Sachs International

GSI files documents and information with the *Commission de Surveillance du Secteur Financier* (the "CSSF"). The following documents, which GSI has filed with the CSSF, are hereby incorporated by reference into this Base Prospectus:

- (a) The Annual Report for the period ended 30 November 2019 of GSI ("GSI's 2019 Annual Report"), containing, in Part II, the Directors' Report and Audited Financial Statements of GSI for the period ended 30 November 2019 ("GSI's 2019 Financial Statements");
- (b) The report on the Regulatory Ratios of Goldman Sachs International for the fiscal quarter ended 31 December 2019 ("GSI's Regulatory Ratios, 31 December 2019");
- (c) The Unaudited Quarterly Financial Report of GSI for the period ended 31 August 2019 ("GSI's 2019 Third Quarter Financial Report"), containing, in Part II, the Unaudited Financial Statements of GSI for the period ended 31 August 2019 ("GSI's 2019 Third Quarter Financial Statements");
- (d) The report on the Regulatory Ratios of Goldman Sachs International for the fiscal quarter ended 31 August 2019 ("GSI's Regulatory Ratios, 31 August 2019");
- (e) The Unaudited Quarterly Financial Report of GSI for the period ended 31 May 2019 ("GSI's 2019 Second Quarter Financial Report"), containing, in Part II, the Unaudited Financial Statements of GSI for the period ended 31 May 2019 ("GSI's 2019 Second Quarter Financial Statements");
- (f) The report on the Regulatory Ratios of Goldman Sachs International for the fiscal quarter ended 31 May 2019 ("GSI's Regulatory Ratios, 31 May 2019");
- (g) The Unaudited Quarterly Financial Report of GSI for the period ended 28 February 2019 ("GSI's 2019 First Quarter Financial Report"), containing, in Part II, the Unaudited Financial Statements of GSI for the period ended 28 February 2019 ("GSI's 2019 First Quarter Financial Statements");
- (h) The report on the Regulatory Ratios of GSI for the fiscal quarter ended 28 February 2019 ("GSI's Regulatory Ratios, 28 February 2019");
- (i) The Annual Report for the fiscal year ended 30 November 2018 of GSI ("GSI's 2018 Annual Report"), containing, in Part II, the Directors' Report and Audited Financial Statements of GSI for the period ended 30 November 2018 ("GSI's 2018 Financial Statements"); and
- (j) The Annual Report for the fiscal year ended 31 December 2017 of GSI ("GSI's 2017 Annual Report"), containing, in Part II, the Directors' Report and Audited Financial Statements of GSI for the period ended 31 December 2017 ("GSI's 2017 Financial Statements").
- (b) deleting the information that appears in sub-section 1 entitled "Goldman Sachs International" under the sub-heading "Cross-Reference List" on pages 147 to 148 of the Original Base Prospectus and replacing it with the following:

## "Cross-Reference List

GSI Information in the Financial Statements	GSI's 2019 Annual Report	GSI's 2018 Annual Report
Management Report/ Strategic Report	pp. 2-41	pp. 2-41
Report of the Directors	pp. 42-43	pp. 42-43
Balance Sheet	p. 51	p. 50
Profit and Loss Account	p. 50	p. 49
Statement of Cash Flows	p. 53	p. 52
Notes to the Financial Statements	pp. 54-95	pp. 53-94
Independent Auditors' Report	pp. 44-49	pp. 44-48

Any information included in the documents incorporated by reference that is not included in the cross-reference list is not incorporated by reference and is therefore not relevant to an investor (meaning that it is not necessary information to be included in the Base Prospectus pursuant to Article 6(1) of the Prospectus Regulation and is not otherwise required to be included under the relevant schedules of Commission Regulation (EC) No 809/2004, as amended (the "**Prospectus Regulation**")."

#### 3. Amendments to the section entitled "General Terms and Conditions of the Instruments"

The information in the section entitled "General Terms and Conditions of the Instruments" is amended and supplemented by:

- (a) deleting the definition of "Reference Price" in General Instrument Condition 2(a) on page 194 of the Original Base Prospectus and replacing it with the following:
  - ""Reference Price" means, in respect of any relevant day and if the Underlying Asset specified in the relevant Final Terms is:
  - (i) a Share, the Closing Share Price of the Share on such day; or
  - (ii) an Index, the Closing Index Level of the Index on such day;
  - (iii) an Index-Linked Derivatives Contract, the Final Reference Price of the Index-Linked Derivatives Contract on such day; or
  - (iv) a Commodity, the Commodity Reference Price of the Commodity on such day; or
  - (v) a Commodity Index, the Closing Level of the Commodity Index on such day; or
  - (vi) an FX Rate, the Exchange Rate on such day; or
  - (vii) an Inflation Index, the level of the Inflation Index published for the Relevant Reference Month immediately preceding such day; or
  - (viii) a Fund, the Fund Reference Price of the Fund on such day;"; and
- (b) deleting the definition of "Underlying Asset" in General Instrument Condition 2(a) on page 199 of the Original Base Prospectus and replacing it with the following:
  - ""Underlying Asset" means a Share, an Index, an Index-Linked Derivatives Contract, a Commodity, a Commodity Index, an FX Rate, an Inflation Index, a Fund, as specified in the relevant Final Terms;".

## 4. Amendments to the section entitled "General Terms and Conditions of the Notes"

The information in the section entitled "General Terms and Conditions of the Notes" is amended and supplemented by:

- (a) deleting the definition of "Reference Price" in General Note Condition 2(a) on page 271 of the Original Base Prospectus and replacing it with the following:
  - ""Reference Price" means, in respect of any relevant day and if the Underlying Asset specified in the relevant Final Terms is:
  - (i) a Share, the Closing Share Price of the Share on such day; or
  - (ii) an Index, the Closing Index Level of the Index on such day;
  - (iii) an Index-Linked Derivatives Contract, the Final Reference Price of the Index-Linked Derivatives Contract on such day; or
  - (iv) a Commodity, the Commodity Reference Price of the Commodity on such day; or
  - (v) a Commodity Index, the Closing Level of the Commodity Index on such day; or
  - (vi) an FX Rate, the Exchange Rate on such day; or
  - (vii) an Inflation Index, the level of the Inflation Index published for the Relevant Reference Month immediately preceding such day; or
  - $(viii) \hspace{0.5cm} a \hspace{0.1cm} Fund, \hspace{0.1cm} the \hspace{0.1cm} Fund \hspace{0.1cm} Reference \hspace{0.1cm} Price \hspace{0.1cm} of \hspace{0.1cm} the \hspace{0.1cm} Fund \hspace{0.1cm} on \hspace{0.1cm} such \hspace{0.1cm} day;"; \hspace{0.1cm} and \hspace{0.1cm} a \hspace{0.1cm} Fund \hspace{0.1cm} on \hspace{0.1cm} such \hspace{0.1cm} day;"; \hspace{0.1cm} and \hspace{0.1cm} a \hspace{0.1cm} Fund \hspace{0.1cm} on \hspace{0.1cm} such \hspace{0.1cm} day;"; \hspace{0.1cm} and \hspace{0.1cm} a \hspace{0.1cm} Fund \hspace{0.1cm} on \hspace{0.1cm} such \hspace{0.1cm} day;"; \hspace{0.1cm} and \hspace{0.1cm} a \hspace{0.1cm} Fund \hspace{0.1cm} on \hspace{0.1cm} such \hspace{0.1cm} a \hspace{0.1cm} Fund \hspace{0.1cm} on \hspace{0.1cm} such \hspace{0.1cm} a \hspace{0.1cm} Fund \hspace{0.1cm} a \hspace{0$

(b) deleting the definition of "Underlying Asset" in General Instrument Condition 2(a) on page 275 of the Original Base Prospectus and replacing it with the following:

""Underlying Asset" means a Share, an Index, an Index-Linked Derivatives Contract, a Commodity, a Commodity Index, an FX Rate, an Inflation Index, a Fund, as specified in the relevant Final Terms;".

# 5. Amendments to the section entitled "Coupon Payout Conditions"

The information in the section entitled "Coupon Payout Conditions" is amended and supplemented by:

- (a) amending Coupon Payout Conditions 1.4 and .1.5 on page 326 of the Original Base Prospectus by replacing each reference to "Coupon Amount" with "coupon amount";
- (b) adding the following paragraph (c) to Coupon Payout Condition 1.3 on page 325 and 326 of the Original Base Prospectus:
  - "(c) This Coupon Payout Condition 1.3(c) applies where "Conditional Coupon" and "Simultaneous Coupon Conditions" are specified to be applicable in the relevant Final Terms and "Deferred Conditional Coupon" is specified to be not applicable in the relevant Final Terms. If this Coupon Payout Condition 1.3(c) applies, Coupon Payout Condition 1.3(a) and the definition of Coupon Amount in Coupon Payout Condition 2(a) shall not apply to Simultaneous Coupon Observation Dates except to the extent specified berein.

Notwithstanding Coupon Payout Condition 1.3(a) and the definition of Coupon Amount in Coupon Payout Condition 2(a), if more than one Coupon Payment Event has occurred on Coupon Observation Dates that fall on the same Valuation Date or Pricing Date ("Simultaneous Coupon Observation Dates"), then the Coupon Amount payable in respect of each Security on the Coupon Payment Date corresponding to such Simultaneous Coupon Observation Dates shall be, if the relevant Final Terms specify:

- (i) "Aggregate Coupon Amounts" to be applicable, the sum of the Coupon Amounts that would, but for this Coupon Payout Condition 1.3(c), have been payable in respect of each Simultaneous Coupon Observation Date on which a Coupon Payment Event has occurred under Coupon Payout Condition 1.3(a);
- (ii) "Highest Coupon Amount" to be applicable, the highest of the Coupon Amounts that would, but for this Coupon Payout Condition 1.3(c), have been payable in respect of each Simultaneous Coupon Observation Date on which a Coupon Payment Event has occurred under Coupon Payout Condition 1.3(a);
- (iii) "Lowest Coupon Amount" to be applicable, the lowest of the Coupon Amounts that would, but for this Coupon Payout Condition 1.3(c), have been payable in respect of each Simultaneous Coupon Observation Date on which a Coupon Payment Event has occurred under Coupon Payout Condition 1.3(a);
- (iv) "Average Coupon Amount" to be applicable, the arithmetic mean of the Coupon Amounts that would, but for this Coupon Payout Condition 1.3(c), have been payable in respect of each Simultaneous Coupon Observation Date on which a Coupon Payment Event has occurred under Coupon Payout Condition 1.3(a),

provided that, in each case, if a Coupon Payment Event has occurred on only one of the Simultaneous Coupon Observation Dates, then the Coupon Amount payable in respect of each Security on the Coupon Payment Date corresponding to such Simultaneous Coupon Observation Dates shall be equal to the Coupon Amount that would, but for this Coupon Payout Condition 1.3(c), have been payable in respect of such Simultaneous Coupon Observation Date on which a Coupon Payment has occurred under Coupon Payout Condition 1.3(a).

For the avoidance of doubt:

- (A) Coupon Payout Condition 1.3(a) applies instead of this Coupon Payout Condition 1.3(c) in respect of all Coupon Observation Dates other than Simultaneous Coupon Observation Dates;
- (B) if no Coupon Payment Event has occurred in respect of any Simultaneous Coupon Observation
  Date, then no Coupon Amount shall be payable in respect of each Security on the Coupon
  Payment Date corresponding to such Simultaneous Coupon Observation Dates; and

- (C) only one Coupon Amount shall be payable in respect of each Security on the Coupon Payment Date corresponding to Simultaneous Coupon Observation Dates on which a Coupon Payment Event has occurred."; and
- (c) deleting the definition of "Coupon Observation Date" in Coupon Payout Condition 2 on page 335 of the Original Base Prospectus and replacing it with the following:

""Coupon Observation Date" means, in respect of an Underlying Asset which is:

- (i) a Share, each Valuation Date specified to be a "Coupon Observation Date" in the relevant Final Terms; or
- (ii) an Index, each Valuation Date specified to be a "Coupon Observation Date" in the relevant Final Terms; or
- (iii) a Commodity, each Pricing Date specified to be a "Coupon Observation Date" in the relevant Final Terms; or
- (iv) a Commodity Index, each Valuation Date specified to be a "Coupon Observation Date" in the relevant Final Terms; or
- (v) an FX Rate, each Valuation Date specified to be a "Coupon Observation Date" in the relevant Final Terms; or
- (vi) a Fund, each Valuation Date specified to be a "Coupon Observation Date" in the relevant Final Terms,

provided that if a single Valuation Date or Pricing Date is specified as a "Coupon Observation Date" in more than one row of the Contingent Coupon Table in the relevant Final Terms, then each occurrence of such Valuation Date or Pricing Date in the Contingent Coupon Table shall be deemed to be a separate Coupon Observation Date for the purposes of these Coupon Payout Conditions."

## 6. Amendments to the section entitled "Autocall Payout Conditions"

The information in the section entitled "Autocall Payout Conditions" is amended and supplemented by:

(a) deleting Autocall Payout Condition 1 on page 343 of the Original Base Prospectus and replacing it with the following:

## "1. Autocall

## 1.1. Autocall Event

If "Autocall Payout Conditions" are specified to be applicable in the relevant Final Terms and the Calculation Agent determines that an Autocall Event in respect of any Autocall Observation Date has occurred (i) if such Security is an Instrument, upon the exercise or deemed exercise of such Security by a Holder pursuant to the Conditions, the Issuer shall pay the Autocall Event Amount on the Autocall Payment Date corresponding to such Autocall Observation Date, or (ii) if such Security is a Note, the Issuer shall redeem each Security on the Autocall Payment Date corresponding to such Autocall Observation Date by payment of the Autocall Event Amount.

## 1.2 Simultaneous Autocall Observation Dates

Notwithstanding Autocall Payout Condition 1.1, if "Simultaneous Autocall Conditions" is specified to be applicable in the relevant Final Terms and more than one Autocall Event has occurred on Autocall Observation Dates that fall on the same Valuation Date or Pricing Date ("Simultaneous Autocall Observation Dates"), then the Autocall Event Amount payable pursuant to Autocall Payout Condition 1.1 in respect of each Security on the Autocall Payment Date corresponding to such Simultaneous Autocall Observation Dates shall be, if the relevant Final Terms specify:

- (i) "Aggregate Autocall Event Amounts" to be applicable, the sum of the Autocall Event Amounts that would, but for this Autocall Payout Condition 1.2, have been payable in respect of each Simultaneous Autocall Observation Date on which an Autocall Event has occurred under Autocall Payout Condition 1.1;
- (ii) "Highest Autocall Event Amount" to be applicable, the highest of the Autocall Event Amounts that would, but for this Autocall Payout Condition 1.2, have been payable in respect of each Simultaneous Autocall Observation Date on which an Autocall Event has occurred under Autocall Payout Condition 1.1;
- (iii) "Lowest Autocall Event Amount" to be applicable, the lowest of the Autocall Event Amounts that would, but for this Autocall Payout Condition 1.2, have been payable in respect of each Simultaneous Autocall Observation Date on which an Autocall Event has occurred under Autocall Payout Condition 1.1;

(iv) "Average Autocall Event Amount" to be applicable, the arithmetic mean of the Autocall Event Amounts that would, but for this Autocall Payout Condition 1.2, have been payable in respect of each Simultaneous Autocall Observation Date on which an Autocall Event has occurred under Autocall Payout Condition 1.1.

provided that, in each case, if an Autocall Event occurs on only one of the Simultaneous Autocall Observation Dates, then the Autocall Event Amount payable in respect of each Security on the Autocall Payment Date corresponding to such Simultaneous Autocall Observation Dates shall be equal to the Autocall Event Amount that would, but for this Autocall Payout Condition 1.2, have been payable in respect of such Simultaneous Autocall Observation Date on which an Autocall Event has occurred under Autocall Payout Condition 1.1.

For the avoidance of doubt:

- (A) this Autocall Payout Condition 1.2 does not apply in respect of Autocall Observation Dates that are not Simultaneous Autocall Observation Dates;
- (B) only one Autocall Event Amount shall be payable in respect of each Security on the Autocall Payment Date corresponding to Simultaneous Autocall Observation Dates on which an Autocall Event has occurred."; and
- (b) deleting the definition of "Autocall Observation Date" in Autocall Payout Condition 2 on pages 345 to 346 of the Original Base Prospectus and replacing it with the following:

## ""Autocall Observation Date" means:

- (i) if the relevant Final Terms specify "Autocall Observation Period" as applicable, any Observation Date (closing valuation) during the Autocall Observation Period; or
- (ii) if the relevant Final Terms specify "Autocall Observation Period" as not applicable, in respect of an Underlying Asset which is:
  - (A) a Share, each Valuation Date or Averaging Date specified to be an "Autocall Observation Date" in the relevant Final Terms; or
  - (B) an Index, each Valuation Date or Averaging Date specified to be an "Autocall Observation Date" in the relevant Final Terms; or
  - (C) a Commodity, each Pricing Date specified to be an "Autocall Observation Date" in the relevant Final Terms; or
  - (D) a Commodity Index, each Valuation Date or Averaging Date specified to be an "Autocall Observation Date" in the relevant Final Terms; or
  - (E) an FX Rate, each Valuation Date specified to be an "Autocall Observation Date" in the relevant Final Terms; or
  - (F) a Fund, each Valuation Date specified to be an "Autocall Observation Date" in the relevant Find Terms,

provided that if a single Valuation Date or Pricing Date is specified as an "Autocall Observation Date" in more than one row of the Autocall Table in the relevant Final Terms, then each occurrence of such Valuation Date or Pricing Date in the Autocall Table shall be deemed to be a separate Autocall Observation Date for the purposes of these Autocall Payout Conditions."

# 7. Amendments to the section entitled "Payout Conditions"

The information in the section entitled "Payout Conditions" is amended and supplemented by:

- (a) deleting the proviso to Payout Condition 1.1(a) on pages 349 and 350 of the Original Base Prospectus and replacing it with the following:
  - "provided that if the relevant Final Terms specify (A) a Cap, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.1(a) shall not exceed the Cap, and/or (B) a Floor, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.1(a) shall not be less than the Floor; or";
- (b) deleting the proviso to Payout Condition 1.2(a) on page 350 of the Original Base Prospectus and replacing it with the following:

"provided that if the relevant Final Terms specify (1) a Trigger Cap, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.2(a) (if applicable) shall not exceed the Trigger Cap, and/or (2) a Trigger Floor, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.2(a) (if applicable) shall not be less than the Trigger Floor; or";

(c) deleting the proviso to Payout Condition 1.2(b) on page 351 of the Original Base Prospectus and replacing it with the following:

"provided that if the relevant Final Terms specify (1) a Cap, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.2(b) shall not exceed the Cap, and/or (2) a Floor, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.2(b) shall not be less than the Floor; or";

(d) deleting the proviso to Payout Condition 1.2(c) on page 352 of the Original Base Prospectus and replacing it with the following:

"provided that if the relevant Final Terms specify (a) a Downside Cap, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.2(c) shall not exceed the Downside Cap, and/or (b) a Downside Floor, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.2(c) shall not be less than the Downside Floor.";

(e) deleting the proviso to Payout Condition 1.3(a) on page 353 of the Original Base Prospectus and replacing it with the following:

"provided that if the relevant Final Terms specify (a) a Cap, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.3(a) shall not exceed the Cap, and/or (b) a Floor, the amount calculated in accordance with the applicable formula specified in this Payout Condition 1.3(a) shall not be less than the Floor; or";

- (f) amending the definition of "Final Closing Price" in Payout Condition 5(a) on page 373 of the Original Base Prospectus by inserting the words ", an Index-Linked Derivatives Contract," immediately following the word "Index, "; and
- (g) amending the definition of "Final Reference Date" in Payout Condition 5(a) on pages 373 and 374 of the Original Base Prospectus by inserting the words "or an Index-Linked Derivatives Contract" immediately following the word "Index".

## 8. Amendments to the section entitled "Index Linked Conditions"

The information in the section entitled "Index Linked Conditions" is amended and supplemented by:

(a) deleting the definition of "Latest Reference Date" in Index Linked Condition 8 (*Definitions*) on page 462 of the Original Base Prospectus and replacing it with the following:

# ""Latest Reference Date" means:

- (a) in respect of a single Index and an Averaging Reference Date or a Reference Date, such Averaging Reference Date or Reference Date, and in respect of an Index Basket and an Averaging Reference Date or a Reference Date (being, for the purposes of this definition, the "Relevant Reference Date"):
  - (i) if, as a result of the Relevant Reference Date not being a Scheduled Trading Day for one or more Indices or as a result of the occurrence of a Disrupted Day for one or more Indices, the Relevant Reference Date for two or more Indices falls on different dates, the date corresponding to the Relevant Reference Date which is the latest to occur, as determined by the Calculation Agent; or
  - (ii) if the Relevant Reference Date for all of the Indices falls on the same date (after adjustment, if any, for non-Scheduled Trading Days or Disrupted Days for such Indices), such same date corresponding to the Relevant Reference Date; or

- (b) in respect of a single Index-Linked Derivatives Contract and a Reference Date, such Reference Date, and in respect of an Index Basket comprising Index-Linked Derivatives Contracts and a Reference Date, the date corresponding to the Reference Date which is the latest to occur, as determined by the Calculation Agent."; and
- (b) deleting the definition of "Valuation Date" in Index Linked Condition 8 (*Definitions*) on page 468 of the Original Base Prospectus and replacing it with the following:

#### ""Valuation Date" means:

- (a) in respect of a Unitary Index or a Multi-Exchange Index, each date specified as such in the relevant Final Terms or otherwise determined as provided in the Conditions and/or in the relevant Final Terms, subject to adjustment (as a Reference Date) in accordance with these Index Linked Conditions (and subject as provided in Index Linked Condition 6 if the relevant Final Terms specify "Index-Linked Derivatives Contract Provisions" to be applicable); or
- (b) in respect of a Proprietary Index, each date specified as such in the relevant Final Terms (each a "Scheduled Valuation Date"), provided that if such Scheduled Valuation Date is not a Strategy Valuation Day, then the Valuation Date scheduled to fall on such Scheduled Valuation Date shall be the earlier to occur of:
  - (i) the first Strategy Valuation Day following such Scheduled Valuation Date; and
  - (ii) the Strategy Business Day that falls the Specified Number of Strategy Business Days after such Scheduled Valuation Date,

provided further that if, following the adjustments in (i) and (ii) above, such Valuation Date falls on the Strategy Business Days that falls the Specified Number of Strategy Business Days after such Scheduled Valuation Date and such date is not a Strategy Valuation Day, then the Closing Index Level of such Proprietary Index in respect of such Valuation Date shall be determined by the Calculation Agent, acting in good faith and in a commercially reasonable manner; or

(c) in respect of an Index-Linked Derivatives Contract, the final settlement day of such Index-Linked Derivatives Contract (as determined by the Derivatives Exchange according to the rules of the Derivatives Exchange) (the "Scheduled Valuation Date"), provided that, only for the purposes of determining the Final Index Level (if applicable), the Scheduled Valuation Date may be subject to adjustment (as a Reference Date) in accordance with Index Linked Condition 1."

## 9. Amendments to the section entitled "Form of Final Terms (Instruments)"

The information in the section entitled "Form of Final Terms (Instruments)" on pages 596 to 599 of the Original Base Prospectus is amended and supplemented by:

(a) inserting the following sub-paragraph (xii) to paragraph 29 (Conditional Coupon (Coupon Payout Condition 1.3) of the Contractual Terms:

"(xii)	Simultaneous Coupon Conditions:	[Applicable] [Not Applicable]. (If Not Applicable, delete the remaining sub-paragraph of this paragraph)			
		[[Aggregate Coupon Amounts] [Highest Coupon Amount] [Lowest Coupon Amount] [Average Coupon Amount] is applicable]"; and			

(b) inserting the following sub-paragraph (ix) to paragraph 34 (*Autocall Payout Conditions*) of the Contractual Terms on page 607 of the Original Base Prospectus:

"(ix)	Simultaneous Coupon Conditions:	[Applicable] [Not Applicable]. (If Not Applicable, delete
		the remaining sub-paragraph of this paragraph)

[[Aggregate	Coupon	Amounts]	[Highest	Coupon
Amount] [Lo	west Cou	pon Amount	[Average	Coupon
Amount] is a	pplicable]'	'		

## 10. Amendments to the section entitled "Form of Final Terms (Notes)"

The information in the section entitled "Form of Final Terms (Notes)" is amended and supplemented by:

(a) the following sub-paragraph (xii) shall be added to paragraph 30 of the Contractual Terms on page 691 of the Original Base Prospectus:

"(xii)	Simultaneous Coupon Conditions:	[Applicable] [Not Applicable]. (If Not Applicable, delete the remaining sub-paragraph of this paragraph)			
		[[Aggregate Coupon Amounts] [Highest Coupon Amount] [Lowest Coupon Amount] [Average Coupon Amount] is applicable.]"; and			

(b) the following sub-paragraph (ix) shall be added to paragraph 34 of the Contractual Terms on page 699 of the Original Base Prospectus:

"(ix)	Simultaneous Autocall Conditions:	[Applicable] [Not Applicable]. (If Not Applicable, delete the remaining sub-paragraph of this paragraph)			
		[[Aggregate Autocall Event Amounts] [Highest Autocall Event Amount] [Lowest Autocall Event Amount] [Average Autocall Event Amount] is applicable]"			

## 11. Amendments to the section entitled "Goldman Sachs International"

The information in the section entitled "Goldman Sachs International" is amended and supplemented by:

(a) deleting the last paragraph of the sub-section entitled "General Information on Goldman Sachs International", on page 803 of the Original Base Prospectus and replacing it with the following:

"The registered office of GSI is Plumtree Court, 25 Shoe Lane, London EC4A 4AU, England, telephone number +44 20 7774 1000."; and

(b) deleting the sub-section entitled "Selected Financial Information", on page 805 of the Original Base Prospectus and replacing it with the following:

"The selected financial information set out below has been extracted from GSI's 2019 Financial Statements and GSI's 2018 Financial Statements, which have been audited by PricewaterhouseCoopers LLP and on which PricewaterhouseCoopers LLP issued an unqualified audit report.

GSI's 2019 Financial Statements and GSI's 2018 Financial Statements have been prepared in accordance with FRS 101. The financial information presented below should be read in conjunction with the financial statements included in such documents, the notes thereto and report thereon.

The following table shows selected key historical financial information in relation to GSI:

#### As at and for the period ended<sup>3</sup>

(in USD millions)	30 November 2019	<b>30 November 2018</b>
Operating Profit	2,656	3,259
Profit before taxation	2,426	3,030
Profit for the financial period	1,802	2,198
	As	at
(in USD millions)	30 November 2019	<b>30 November 2018</b>

(in USD millions)	<b>30 November 2019</b>	<b>30 November 2018</b>
Fixed Assets	409	315
Current Assets	1,040,845	886,652
Total Shareholders' Funds	34,248	33,917

<sup>&</sup>lt;sup>1</sup> During the period ended 30 November 2018, GSI changed its accounting reference end date from December 31 to November 30 to conform to the period used by GSI for U.S. tax reporting purposes. All references to November 2018 refer to the eleven months period ended, or the date, as the context requires, 30 November 2018."

#### 12. Amendments to the section entitled "General Information"

The information in the section entitled "General Information" is amended and supplemented by:

(a) deleting paragraph (a) under the sub-section 2 "Financial Statements" on page 903 of the Original Base Prospectus in its entirety and replacing it with the following:

# "(a) Goldman Sachs International

The statutory financial statements of GSI for the periods ended 30 November 2019 and 30 November 2018 have been audited without qualification by PricewaterhouseCoopers LLP, Chartered Accountants and Statutory Auditors, of 7 More London Riverside, London, SE1 2RT in accordance with the laws of England. PricewaterhouseCoopers LLP is a registered member of the Institute of Chartered Accountants in England and Wales."

(b) deleting the no significant change and no material adverse change statements relating to GSI in sub-section 3 "No significant change and no material adverse change" on page 903 of the Original Base Prospectus and replacing it with the following:

"There has been no significant change in the financial or trading position of GSI since 30 November 2019. There has been no material adverse change in the prospects of GSI since 30 November 2019.";

(c) deleting sub-section 4 "Litigation" on page 904 of the Original Base Prospectus and replacing it with the following:

# "4. Litigation

Save as disclosed in (i) "Legal Proceedings" of Note 27 to the Financial Statements (pages 185 to 193) of GSG's 2019 Form 10-K, (ii) "Legal Proceedings" of Note 26 to the Financial Statements (pages 77 to 79) of GSI's 2019 Annual Report, there have been no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which GSI, GSW, GSFCI or GSG is aware) during the 12 months before the date of this Base Prospectus which may have, or have had in the recent past, significant effects on GSI, GSW, GSFCI or GSG's financial position or profitability."; and

(d) deleting sub-section 5 (*Availability of Documents*) on pages 904 to 905 of the Original Base Prospectus and replacing it with the following:

## "5. Availability of Documents

For so long as any Securities shall be outstanding or may be issued under the Programme, copies of the following documents may be obtained free of charge upon request during normal business hours from the specified office of the Issuers and the office of the Paying Agent in Luxembourg and each of the Paying Agents:

- (i) the constitutional documents of GSI;
- (ii) the constitutional documents of GSW;
- (iii) the constitutional documents of GSFCI;
- (iv) the certificate of incorporation of GSG;
- (v) GSI's 2019 Third Quarter Financial Report;
- (vi) GSI's 2019 Second Quarter Financial Report;
- (vii) GSI's 2019 First Quarter Financial Report;
- (viii) GSI's Regulatory Ratios, 31 December 2019;
- (ix) GSI's Regulatory Ratios, 31 August 2019;
- (x) GSI's Regulatory Ratios, 31 May 2019;
- (xi) GSI's Regulatory Ratios, 28 February 2019;
- (xii) GSI's 2019 Annual Report;
- (xiii) GSI's 2018 Annual Report;
- (xiv) GSI's 2017 Annual Report;
- (xv) GSW's 2019 Interim Financial Statements;
- (xvi) GSW's 2018 Financial Statements;
- (xvii) GSW's 2017 Financial Statements;
- (xviii) GSW's 2019 Financial Statements;
- (xix) GSFCI's 2019 Interim Financial Report;
- (xx) GSFCI's 2018 Financial Statements;
- (xxi) GSFCI's 2017 Financial Statements;
- (xxii) GSG's 15 January 2020 Form 8-K;
- (xxiii) GSG's 15 October 2019 Form 8-K;
- (xxiv) GSG's 16 July 2019 Form 8-K;
- (xxv) GSG's 2019 First Quarter Form 10-Q;
- (xxvi) GSG's 2019 Second Quarter Form 10-Q;
- (xxvii) GSG's 2019 Third Quarter Form 10-Q;
- (xxviii) GSG's 2019 Proxy Statement;
- (xxix) GSG's 2019 Form 10-K;
- (xxx) GSG's 2018 Form 10-K;

(xxxi) the GSG Guaranty;
(xxxii) the GSI Guarantee;
(xxxiii) the GSI (Cayman) Guarantee;
(xxxiv) the Programme Agency Agreement;
(xxxv) the Deed of Covenant and the Cayman Deed of Covenant;

(xxxvi) the Final Terms for each Tranche or Series of Securities that are listed on the Official List of the Luxembourg Stock Exchange or any other stock exchange;

(xxxvii) a copy of the Base Prospectus;

(xxxviii) a copy of any supplement to the Base Prospectus and Final Terms; and

(xxxix) all reports, letters and other documents, balance sheets, valuations and statements by any expert any part of which is extracted or referred to in this Base Prospectus."

## **Applicable Final Terms**

The amendments included in this Prospectus Supplement shall only apply to Final Terms, the date of which falls on or after the approval of this Prospectus Supplement.

## Responsibility

Each of GSI, GSW, GSFCI and GSG accepts responsibility for the information given in this Prospectus Supplement and confirms that, having taken all reasonable care to ensure that such is the case, the information contained in this Prospectus Supplement is, to the best of their knowledge, in accordance with the facts and does not omit anything likely to affect its import.

#### Interpretation

To the extent that there is any inconsistency between (a) any statement in this Prospectus Supplement and (b) any other statement in or incorporated by reference into the Base Prospectus, the statements in (a) above will prevail.

References to the Base Prospectus shall hereafter mean the Base Prospectus as supplemented by this Prospectus Supplement.

#### U.S. notice

This Prospectus Supplement is not for use in, and may not be delivered to or inside, the United States.

The date of this Prospectus Supplement is 7 April 2020