PROSPECTUS SUPPLEMENT NO. 11
TO THE BASE PROSPECTUS DATED 17 JULY 2020

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

EU Prospectus Regulation

This prospectus supplement (the "**Prospectus Supplement**") to the base prospectus dated 17 July 2020 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 23(1) of Regulation (EU) 2017/1129 (as amended, the "**EU Prospectus Regulation**") and should be read in conjunction with Prospectus Supplement No. 1 to the Original Base Prospectus dated 4 August 2020, Prospectus Supplement No. 2 to the Original Base Prospectus dated 21 August 2020, Prospectus Supplement No. 3 to the Original Base Prospectus dated 31 August 2020, Prospectus Supplement No. 4 to the Original Base Prospectus dated 8 October 2020, Prospectus Supplement No. 5 to the Original Base Prospectus dated 26 October 2020, Prospectus Supplement No. 6 to the Original Base Prospectus dated 18 November 2020, Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021, Prospectus Supplement No. 8 to the Original Base Prospectus dated 17 February 2021, the Prospectus Supplement No. 9 to the Original Base Prospectus dated 22 March 2021, and Prospectus Supplement No. 10 to the Original Base Prospectus dated 20 April 2021 (the Original Base Prospectus as so supplemented, the "**Base Prospectus**"). On 17 July 2020, the *Commission de Surveillance du Secteur Financier* (the "**CSSF**") approved the Base Prospectus for the purposes of Article 6 of the Luxembourg Law dated 16 July 2019 on prospectuses for securities.

UK Prospectus Regulation

This Prospectus Supplement constitutes a supplement to the Base Prospectus for the purposes of Article 23(1) of the UK Prospectus Regulation (as defined below). Prior to the "IP completion day" as defined under the European Union (Withdrawal) Act 2018 (as amended, the "**EUWA**"), the Base Prospectus has been approved by the *Commission de Surveillance du Secteur Financier* (the "**CSSF**") as competent authority under Regulation (EU) 2017/1129 (as amended, the "**EU Prospectus Regulation**") and notification of such approval has been made to the United Kingdom Financial Conduct Authority (the "**FCA**"). By virtue of Regulation 74 of the Prospectus (Amendment etc.) (EU Exit) Regulations 2019 (as amended), the Base Prospectus shall be treated for the purposes of Regulation (EU) 2017/1129 as it forms part of UK domestic law by virtue of the EUWA and regulations made thereunder (as amended, the "**UK Prospectus Regulation**") as if it had been approved by the FCA at the respective times when the Original Base Prospectus and each of the above-referenced Prospectus Supplements were approved by the CSSF. Such approval relates only to Securities which are to be admitted to trading on a UK regulated market for the purposes of Regulation (EU) No.600/2014 as it forms part of UK domestic law by virtue of the EUWA (as amended, "**UK MiFIR**") and/or which are to be offered to the public in the United Kingdom. This Prospectus Supplement has been approved by the FCA, as competent authority under the UK Prospectus Regulation. The FCA only approves this Prospectus Supplement as meeting the standards of completeness, comprehensibility and consistency imposed by the UK Prospectus Regulation. Such approval by the FCA should not be considered as an endorsement of the Issuers or the quality of the Securities that are the subject of the Base Prospectus and this Prospectus Supplement. Investors should make their own assessment as to the suitability of investing in the Securities.

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

EU Prospectus Regulation

In accordance with Article 23(2a) of the EU Prospectus Regulation, investors in the European Economic Area who have already agreed to purchase or subscribe for Securities issued under the Programme before this Prospectus Supplement is published and where the Securities have not yet been delivered to them at the time when the significant new factor, material mistake or material inaccuracy to which this Prospectus Supplement relates, arose or was noted, where the Securities are affected by the significant new factor, material mistake or material inaccuracy to which this Prospectus Supplement relates, have the right, exercisable until 26 April 2021, which is three working days after the publication of this Prospectus Supplement, to withdraw their acceptances. Investors may contact the relevant Authorised Offeror(s) (as set out in the Final Terms of the relevant Securities) should they wish to exercise such right of withdrawal.

UK Prospectus Regulation

In accordance with Article 23(2) of the UK Prospectus Regulation and PRR 3.4.1 of the FCA's Prospectus Regulation Rules sourcebook, investors in the United Kingdom who have already agreed to purchase or subscribe for Securities issued under the Programme before this Prospectus Supplement is published and where the Securities have not yet been delivered to them at the time when the significant new factor, material mistake or material inaccuracy to which this Prospectus Supplement relates, arose or was noted, where the Securities are affected by the significant new factor, material mistake or material inaccuracy to which this Prospectus Supplement relates, have the right, exercisable until 26 April 2021, which is three working days after the publication of this Prospectus Supplement, to withdraw their acceptances. Investors may contact the relevant Authorised Offeror(s) (as set out in the Final Terms of the relevant Securities) should they wish to exercise such right of withdrawal.

Responsibility

Each of GSI, GSW, GSFCI and GSG accepts responsibility for the information given in this Prospectus Supplement and confirms that, to the best of their knowledge, the information contained in this Prospectus Supplement is in accordance with the facts and that this Prospectus Supplement makes no omission likely to affect its import.

Purpose of this Prospectus Supplement

The purpose of this Prospectus Supplement is to (a) incorporate by reference GSI's 2020 Annual Report (as defined below), (b) incorporate by reference GSG's 2021 Proxy Statement (as defined below), (c) incorporate by reference GSG's 14 April 2021 Form 8-K (as defined below) and (d) make certain changes to the information in the "Risk Factors", "Documents Incorporated by Reference", "Share Linked

Conditions", "Index Linked Conditions", "Goldman Sachs Single Stocks Static Basket Indices", "Goldman Sachs International" and "General Information" sections of the Base Prospectus.

This Prospectus Supplement will be available on the website of the Luxembourg Stock Exchange at *www.bourse.lu* and the Financial Conduct Authority at *https://marketsecurities.fca.org.uk/*.

Information being supplemented

Incorporation by reference

This Prospectus Supplement supplements the Base Prospectus by incorporating by reference (a) the Annual Report for the thirteen months ended 31 December 2020 of Goldman Sachs International ("**GSI's 2020 Annual Report"**) containing, in Part II the Directors' Report and Audited Financial Statements of GSI for the period ended 31 December 2020, (b) the Proxy Statement relating to GSG's 2021 Annual Meeting of Shareholders on 29 April 2021 ("**GSG's 2021 Proxy Statement**"), as filed with the U.S. Securities and Exchange Commission ("**SEC**") on 19 March 2021 and (c) the Current Report on Form 8-K dated 14 April 2021 of The Goldman Sachs Group, Inc. ("**GSG's 14 April 2021 Form 8-K**"), as filed with the SEC on 14 April 2021.

Copies of the GSI's 2020 Annual Report, GSG's 2021 Proxy Statement and GSG's 14 April 2021 Form 8-K have been filed with the CSSF in its capacity as competent authority under the Luxembourg Law.

GSI's 2020 Annual Report, GSG's 2021 Proxy Statement and GSG's 14 April 2021 Form 8-K are incorporated by reference into, and forms part of, this Prospectus Supplement, and the information contained in this Prospectus Supplement, GSI's 2020 Annual Report, GSG's Proxy Statement and GSG's 14 April 2021 Form 8-K shall be deemed to update and, where applicable, supersede any information contained in the Base Prospectus, or any documents incorporated by reference therein.

Amendments and updates to certain information in 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*" as supplemented up to Prospectus Supplement No. 10 to the Original Base Prospectus dated 20 April 2021, is amended and supplemented as follows:

(a) Risk factors in sub-section 2 entitled "*Risks Relating to GSI*" on pages 20 to 36 of the Original Base Prospectus is 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.

2.1 **Credit Risks**

The Issuer may partially or wholly fail to meet its obligations under the Securities. Investors should therefore take the creditworthiness of the Issuer, as well as the creditworthiness of the relevant Guarantor of the Securities, into account in their investment decision. Credit risk means the risk of insolvency or illiquidity of the Issuer, i.e. a potential, temporary or final inability to fulfil its interest and repayment obligations on time. An increased insolvency risk is typical of issuers that have a low creditworthiness.

Although the return on your Securities will be based on the performance of the Underlying Asset(s) (if applicable), the payment of any amount due on, or delivery of any asset(s) deliverable under, the Securities is subject to the credit risk of the Issuer, and (if applicable) the credit risk of the relevant Guarantor. This is also the case for Securities not linked to any Underlying Asset. The Securities and the Guarantees are our unsecured obligations. Investors are dependent on our ability to pay all amounts due on, or deliver any asset(s) deliverable under, the Securities, and therefore investors are subject to our credit risk and to changes in the market's view of our creditworthiness. Similarly, investors are dependent on the ability of (if applicable) the relevant Guarantor, to pay all amounts due on the Securities, and therefore are also subject to its credit risk and to changes in the market's view of its creditworthiness.

Because the assets of GSG consist principally of interests in the subsidiaries through which GSG conducts its businesses, its right to participate as an equity holder in any distribution of assets of any of its subsidiaries upon the subsidiary's liquidation or otherwise, and thus the ability of the security holders of the Issuer, as the beneficiaries of the GSG Guaranty (if applicable), to benefit from the distribution, is junior to creditors of the subsidiary, except to the extent that any claims GSG may have as a creditor of the subsidiary are recognised. In addition, dividends, loans and advances to GSG from some of its subsidiaries are restricted by net capital requirements under the Securities Exchange Act of 1934 and under rules of securities exchanges and other regulatory bodies. Furthermore, because some of the subsidiaries of GSG are partnerships in which GSG is a general partner or the sole limited partner, GSG may be liable for their obligations. GSG also guarantees many of the obligations of its subsidiaries other than the Issuer. Any liability GSG may have for its subsidiaries' obligations could reduce its assets that are available to satisfy its obligations under the GSG Guaranty to the investors in securities of the Issuer.

The Securities are not bank deposits and are not insured or guaranteed by the UK Financial Services Compensation Scheme, the Jersey Depositors Compensation Scheme, the U.S. Federal Deposit Insurance Corporation, the U.S. Deposit Insurance Fund or any other government or governmental or private agency or deposit protection scheme in any jurisdiction. Investors are dependent on our ability to pay all amounts due on the Securities, and therefore investors are subject to our credit risk and to changes in the market's view of our creditworthiness.

Where applicable, the bankruptcy or resolution of the relevant Guarantor will not constitute an event of default in relation to the Securities. There is no automatic default or acceleration upon the bankruptcy or resolution of the relevant Guarantor. In the event that the relevant Guarantor becomes subject to bankruptcy or resolution proceedings (but the Issuer does not), you will not be able to declare the Securities to be immediately due and repayable. Instead, you will need to wait until the earlier of the time that (i) the Issuer itself becomes bankrupt or otherwise defaults on the terms of the Securities and (ii) the time the Securities become due and repayable at their maturity. Therefore, the return you receive on the Securities in this particular circumstance could be significantly less than what you would have otherwise received had you been able to declare the Securities immediately due and repayable upon the bankruptcy or resolution of the relevant Guarantor.

2.2 Risks relating to GSI's financial situation

(a) *Risks relating to economic and market conditions*

GSI's businesses have been and may in the future be adversely affected by conditions in the global financial markets and broader economic 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, business, consumer and investor confidence, stable geopolitical conditions and strong business earnings.

Unfavourable or uncertain economic and market conditions can be caused by: low levels of or declines in economic growth, business activity or investor, business or consumer confidence; pandemics; 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 potential increases in tax rates 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; corporate, political or other scandals that reduce investor confidence in capital markets; extreme weather events or other natural disasters; 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 the COVID-19 pandemic, 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 potential 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 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 evolving regulatory frameworks.

(b) ***Risks relating to liquidity***

GSI's liquidity, profitability and businesses may be adversely affected by an inability to access the debt capital markets or to sell assets.

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 Group affiliates, an inability to sell assets or redeem investments, lack of timely settlement of transactions, or other 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 or economic disruption or an operational problem that affects third parties or GSI or its affiliates or even by the perception among 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 otherwise generally liquid 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.

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, deductions for holding total loss-absorbing capacity ("**TLAC**") 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.

Reductions in GSI's credit ratings or an increase in its credit spreads may adversely affect its liquidity and cost of funding. 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.

(c) ***Risks relating to concentration of risk***

Concentration of risk increases the potential for significant losses in GSI’s market-making, underwriting, investing and financing activities.

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 concentrated 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, and 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.

(d) ***Risks relating to credit quality***

GSI’s businesses, profitability and liquidity may be adversely affected by deterioration in the credit quality of or defaults by third parties.

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.

(e) ***Risks relating to changes in underliers***

Certain of GSI's businesses and its funding instruments may be adversely affected by changes in other reference rates, currencies, indices, baskets or exchange-traded funds ("**ETF**") to which products GSI offers or funding that GSI raises are linked.

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 an index, currency, basket, ETF or other financial metric (the 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 a country withdraws from the Euro or links its currency to or delinks its currency from another currency or benchmark, an index or ETF sponsor materially alters the composition of an index or ETF, or stocks in a basket are delisted or become impermissible to be included in the index or ETF) or the underlier ceases to be recognised as an acceptable market benchmark, GSI may experience adverse effects consistent with those described above for IBORs.

Certain of GSI's businesses, its funding instruments and financial products may be adversely affected by changes in or the discontinuance of IBORs, in particular LIBOR.

The administrator of LIBOR has proposed to extend publication of the most commonly used U.S. Dollar LIBOR settings to June 30, 2023 and to cease publishing other LIBOR settings on December 31, 2021. The U.S. federal banking agencies have issued guidance strongly encouraging banking organisations to cease using the U.S. Dollar LIBOR as a reference rate in new contracts as soon as practicable and in any event by December 31, 2021. It is not possible to know whether LIBOR will continue to be viewed as an acceptable market benchmark, what rate or rates may become accepted alternatives to LIBOR, or what the effect of any such changes in views or alternatives may have on the financial markets for LIBOR-linked financial instruments. Similar developments have occurred with respect to other IBORs.

Uncertainty regarding IBORs and the taking of discretionary actions or negotiation of fallback provisions could result in 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.

The language in GSI's contracts and financial instruments that define IBORs, in particular LIBOR, have developed over time and have various events that trigger when a successor rate to the designated rate would be selected. If a trigger is satisfied, contracts and financial instruments often give the calculation agent (which may be GSI) discretion over the successor rate or benchmark to be selected. As a result, there is considerable 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. Although GSI has adhered to the ISDA IBOR Fallbacks Protocol, the protocol is applicable to derivatives when both parties adhere to the protocol or otherwise agree for it to apply to their derivatives.

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.

2.3 **Risks relating to GSI's business activities and industry**

(a) ***Risks relating to market volatility***

GSI's businesses have been and may in the future be adversely affected by declining asset values, particularly where 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 its 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 that supports the obligations of clients and counterparties. 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 time-consuming disputes over asset values and the level of required collateral, as well as increased credit risk to the recipient of the collateral due to delays in receiving adequate collateral. In cases where GSI forecloses on collateral, sudden declines in the value or liquidity of the collateral may, despite credit monitoring, over-collateralisation, the ability to call for additional collateral or the ability to force repayment of the underlying obligation, result in significant losses to 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.

(b) ***Risks related to credit markets***

GSI's businesses have been and may in the future be adversely affected by disruptions or lack of liquidity in the credit markets, including reduced access to credit and higher costs of obtaining credit.

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 raising deposits at its bank subsidiaries, by issuing hybrid financial instruments and 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.

(c) ***Risks relating to composition of client base***

GSI’s results have been and may in the future be adversely affected by the composition of its 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. Similarly, GSI has not historically engaged in retail equities intermediation to the same extent as other financial institutions, which has in the past and could in the future adversely affect its market share in equities execution.

(d) ***Risks relating to derivative transactions***

Derivative transactions and delayed documentation or settlements may expose GSI to credit risk, unexpected risks and potential losses.

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 adopted or 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 has increased credit exposure to central clearing platforms.

(e) ***Risks relating to competition***

The financial services industry is highly competitive.

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 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.

2.4 **GSI's legal and regulatory risks**

(a) ***Risks relating to regulation***

GSI’s businesses and those of its clients are subject to extensive and pervasive regulation around the world.

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 its compliance with laws, rules 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 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.

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.

If there are new laws or regulations or changes in the enforcement of existing laws or regulations applicable to its businesses or those of its 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 stock transfers and other financial transactions, could adversely impact levels of market activity more broadly, and thus impact GSI's businesses. Changes to laws and regulations, such as tax laws, could also have a disproportionate impact on GSI, based on the way those laws or regulations are applied to financial services and financial firms or due to its corporate structure.

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 its profitability and competitive position, particularly if these requirements do not apply, or do not apply equally, to its competitors or are not implemented uniformly across jurisdictions. GSI may also become subject to higher and more stringent capital and other regulatory requirements as a result of the implementation of Basel Committee standards, including those published in December 2017.

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 it 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 its 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 it operates. Compliance with these laws and regulations may require it to change its policies, procedures and technology for information security, which could, among other things, make it 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 they 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 advisor or investment advisor 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.

(b) ***Risks relating to Brexit***

On January 31, 2020, the UK left the EU and on December 31, 2020, the transition period under the Withdrawal Agreement between the UK and the EU ended. GSI has experienced considerable change in the regulatory framework that governs transactions and business undertaken by GSI in the EU. The UK has adopted EU financial services legislation that was in effect on December 31, 2020, which means that the UK financial services regime will remain substantially the same as under EU financial services legislation. However, in the future the UK may diverge from EU legislation and may decide not to adopt rules that correspond to EU legislation not already operative in the UK. 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, GSI is and will be subject to additional regulation and supervision in those jurisdictions.

GSI is incorporated and headquartered in the UK, and during the transition period benefitted 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. Effective December 31, 2020, and notwithstanding the Trade and Cooperation Agreement between the UK and the EU reached at the end of 2020, firms established in the UK, including GSI, have lost their pan-EU "passports" and are generally treated as any other entities in countries outside the EU whose access to the EU is governed by EU and national law.

As necessary, certain client relationships and activities currently undertaken by GSI have been 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.

(c) ***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. GSI has seen legal claims by clients increase in a market downturn and employment-related claims increase following periods of headcount reduction. Additionally, governmental entities have been plaintiffs and are parties in certain of the legal proceedings, 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. Violation of these or similar laws and regulations have in the past resulted in and could in the future result in significant monetary penalties. Such violations could also result in 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.

2.5 **GSI's internal control risks**

(a) ***Risks relating to operational infrastructure***

A failure in GSI's operational systems or infrastructure, or those of third parties, as well as human error, malfeasance or other misconduct, could impair its liquidity, disrupt its businesses, result in the disclosure of confidential information, damage its reputation and cause losses.

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 the 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. Their importance has continued to increase, in particular in light of work-from-home arrangements implemented in response to the COVID-19 pandemic. Computers and computer networks are subject to various risks, including, among others, cyber-attacks, inherent technological defects, system failures and human error. 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, including 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, including in connection with GSI's new business initiatives. GSI may not be able to effectively monitor or mitigate operational risks relating to its vendors' use of common service providers.

(b) ***Risks relating to cyber security***

A failure to protect GSI’s computer systems, networks and information, and its clients’ information, against cyber attacks and similar threats could impair its ability to conduct its businesses, result in the disclosure, theft or destruction of confidential information, damage its reputation and cause losses.

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, as do work-from-home arrangements such as those implemented in response to the COVID-19 pandemic. 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 if these measures are ineffective, 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. *See also Risk factor 2.5 (a) above (Risks relating to operational infrastructure).*

The increased use of mobile and cloud technologies can heighten these and other operational risks, as can work-from-home arrangements. 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.

(c) ***Risks relating to risk management***

GSI may incur losses as a result of ineffective risk management processes and strategies. 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.

2.6 GSI's environmental, social and governance risks

(a) *Risks relating to new business initiatives*

GSI faces enhanced risks as new business initiatives and acquisitions lead it to engage in new activities, operate in new locations, 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 clients, counterparties and investors. 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.

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, as reflected by the settlements relating to 1Malaysia Development Berhad ("**1MDB**").

(b) ***Risks relating to operating in multiple jurisdictions***

In conducting GSI's business around the world, GSI is subject to political, legal, regulatory and other risks that are inherent in operating in many countries. In conducting GSI's businesses and supporting its global operations, GSI is subject to risks of possible nationalisation, expropriation, price controls, capital controls, exchange controls, communications and other restrictions 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. GSI is also subject to the risk that its businesses may be subject to divergent laws and regulations across markets and the jurisdictions in which it operates may implement laws and regulations that directly conflict with those of another jurisdiction. 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 and other sanctions. 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.

(c) ***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 Group's businesses and client base, GSI regularly addresses potential conflicts of interest, including situations where services to a particular client or the 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 Group and situations where it may be a creditor of an entity with which the 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 adversely 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, the Group's One Goldman Sachs initiative aims to increase collaboration amongst its businesses, which may increase the potential for actual or perceived conflicts of interest and improper information sharing.

(d) ***Risks relating to personnel***

GSI's businesses would 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 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.

(e) ***Risks relating to negative publicity***

GSI may be adversely affected by increased governmental and regulatory scrutiny or 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. Postings on these types of forums may also adversely impact risk positions of GSI's clients and other parties that owe it money, securities or other assets and increase the chance that they will not perform their obligation to the firm or reduce the revenues received from their use of GSI's services. The speed and pervasiveness with which information can be disseminated through these channels, in particular social media, may magnify risks relating to negative publicity.

(f) ***Risks relating to unforeseen or catastrophic events***

GSI may incur losses as a result of unforeseen or catastrophic events, including pandemics, terrorist attacks, extreme weather events or other natural disasters. The occurrence of unforeseen or catastrophic events, including pandemics such as COVID-19, or other widespread health emergencies (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 and limitations on occupancy in GSI's offices) that could impair GSI’s ability to manage its businesses and result in losses.

GSI's businesses, financial condition, liquidity and results of operations have been and may in the future be adversely affected by the COVID-19 pandemic. The COVID-19 pandemic has created economic and financial disruptions that have in the past adversely affected, and may in the future adversely affect GSI's business, financial condition, liquidity and results of operations. The extent to which the COVID-19 pandemic will negatively affect GSI’s businesses, financial condition, liquidity and results of operations will depend on future developments, including the widespread availability, use and effectiveness of vaccines, which are highly uncertain and cannot be predicted.

While financial markets have rebounded from the significant declines that occurred earlier in the pandemic and global economic conditions showed signs of improvement during the second half of 2020, many of the circumstances that arose or became more pronounced after the onset of the COVID-19 pandemic persisted at the end of the year, including (i) muted levels of business activity across many sectors of the economy, relatively weak consumer confidence and high unemployment; (ii) elevated levels of market volatility; (iii) certain overnight interest rates and yields on certain government securities near zero; (iv) substantial uncertainty about whether previously announced merger and acquisition deals will be completed or restructured; (v) heightened credit risk with regard to industries that have been most severely impacted by the pandemic, including oil and gas, gaming and lodging, and airlines; (vi) greater emphasis by investors on liquidity products, which generate lower fees, relative to risk assets; and (vii) higher cybersecurity, information security and operational risks as a result of work-from-home arrangements.

Depending on the duration and severity of the pandemic going forward, as well as the effects of the pandemic on consumer and corporate confidence, the conditions noted above could continue for an extended period and other adverse developments may occur or reoccur, including (i) a repeat, or worse, of the decline in the valuation of equity, fixed-income and commodity markets that occurred at the outset of the pandemic; (ii) further declines in certain interest rates, to zero or below; (iii) market dislocations that may make hedging strategies less effective or ineffective; (iv) disruption in the new issuance markets for debt and equity, leading to a decline in activity; (v) a deterioration in the liquidity profile of corporate borrowers, resulting in additional draws on credit lines; (vi) defaults by consumers or corporate clients on loans; and (vii) greater challenges in valuing derivative positions and associated collateral, leading to significant increases in collateral calls and valuation disputes.

The effects of the COVID-19 pandemic on economic and market conditions have in the past and may in the future also increase demands on GSI's liquidity as it meets client needs. Likewise, these adverse developments have in the past and may in the future affect GSI's capital and leverage ratios.

Governmental authorities worldwide have taken increased measures from March 2020 onwards to stabilise the markets and support economic growth. The continued success of these measures is unknown and they may not be sufficient to address future market dislocations or avert severe and prolonged reductions in economic activity. GSI also faces an increased risk of client disputes, litigation and governmental and regulatory scrutiny as a result of the effects of the COVID-19 pandemic on economic and market conditions.

The length of the pandemic and the efficacy of the extraordinary measures that have been put in place to address it are unknown. Until the pandemic subsides, GSI may experience reduced activity levels in investment banking, reduced revenues in investment management and increased client defaults. Even after the pandemic subsides, most major economies may continue to experience a recession, and GSI anticipates its businesses would be materially and adversely affected by a prolonged recession in major markets.

(g) ***Risks relating to climate change***

Climate change concerns could disrupt GSI's business, adversely affect client activity levels, adversely affect the creditworthiness of its counterparties 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 and client relationships may be damaged as a result of its involvement, or its clients' involvement, in certain industries or projects associated with causing or exacerbating climate change , as well as any decisions GSI makes to continue to conduct or change its activities in response to considerations relating to climate change. New regulations or guidance relating to climate change, as well as the perspectives of shareholders, employees or other stakeholders regarding climate change, may affect whether and on what terms and condition GSI can engage in certain activities or offer certain products.

(h) ***Risks relating to the potential exercise by a resolution authority of its resolution powers in relation to GSI***

The application of regulatory strategies and requirements to facilitate the orderly resolution of large financial institutions could create greater risk of loss for GSI’s security holders. 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

The EU Bank Recovery and Resolution Directive ("**BRRD**") entered into force on 2 July 2014. EU member states were required to adopt and publish the laws, regulations and administrative provisions necessary to comply with the BRRD. Its stated aim is to provide national "resolution authorities" with powers and tools to address banking crises pre-emptively in order to safeguard financial stability and minimise taxpayers' exposure to losses.

The majority of the requirements of the BRRD have been implemented in the UK through the UK Banking Act 2009, as amended and related statutory instruments (together, the "**UK Banking Act**"). The UK Banking Act provides for a "resolution regime" granting substantial powers to the Bank of England (or, in certain circumstances, HM Treasury), to implement resolution measures (in consultation with other UK authorities) with respect to a UK financial institution (such as GSI) where the resolution authority considers that the relevant institution is failing or is likely to fail, there is no reasonable prospect of other measures preventing the failure of the institution and resolution action is necessary in the public interest.

The resolution powers available to the resolution authority include powers to:

write down the amount owing, including to zero, or convert the relevant securities into other securities, including ordinary shares of the relevant institution (or a subsidiary) – the so-called "bail-in" tool;

- transfer all or part of the business of the relevant institution to a "bridge bank";
- transfer impaired or problem assets to an asset management vehicle; and
- sell the relevant institution to a commercial purchaser.

In addition, the resolution authority is empowered to modify contractual arrangements, suspend enforcement or termination rights that might otherwise be triggered and disapply or modify laws in the UK (with possible retrospective effect) to enable the recovery and resolution powers under the UK Banking Act to be used effectively.

You should assume that, in a resolution situation, financial public support will only be available to GSI (or any member of Goldman Sachs) as a last resort after the relevant resolution authorities have assessed and used, to the maximum extent practicable, the resolution tools, including the bail-in tool.

In the event that GSI, or any of its affiliates, becomes subject to a proceeding under the Federal Deposit Insurance Act or Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together, the "**U.S. Special Resolution Regimes**"), default rights against GSI in relation to the Instruments or (if applicable) to the relevant Guarantee given by GSI (as Guarantor) in relation to any Instruments issued by GSW, are permitted to be exercised to no greater extent than such default rights could be exercised under such U.S. Special Resolution Regime if the Instruments were governed by the laws of the United States or a state of the United States.

You should be aware that the exercise of any such resolution power or even the suggestion of any such potential exercise in respect of GSI (or any member of Goldman Sachs) could have a material adverse effect on the rights of holders of Securities and (if applicable) the relevant Guarantee given by GSI (as Guarantor), and could lead to a loss of some or all of the investment. The resolution regime is designed to be triggered prior to insolvency of the relevant institution, and holders of securities issued by such institution may not be able to anticipate the exercise of any resolution power (including exercise of the "bail-in" tool) by the resolution authority. Further, holders of securities issued by an institution which has been taken into a resolution regime will have very limited rights to challenge the exercise of powers by the resolution authority, even where such powers have resulted in the write down of the securities or conversion of the securities to equity.

Acknowledgement of bail-in power in respect of Swiss Securities issued by GSI: if you purchase Swiss Securities issued by GSI, you shall be deemed to have agreed to be bound by the exercise of any UK Bail-In Power by the Relevant UK Resolution Authority. *See General Instrument Condition* ***Error! Reference source not found.*** *(Contractual acknowledgment of bail-in in respect of Swiss Securities issued by GSI) and General Note Condition* ***Error! Reference source not found.*** *(Contractual acknowledgment of bail-in in respect of Swiss Securities issued by GSI).*

Acknowledgement of bail-in power in respect of French Law Instruments and French Law Notes issued by GSI: if you purchase French Law Instruments or French Law Notes issued by GSI, you shall be deemed to have agreed to be bound by the exercise of any UK Bail-In Power by the Relevant UK Resolution Authority. See General Instrument Condition **Error! Reference source not found.** (Contractual acknowledgment of bail-in in respect of French Law Instruments issued by GSI) and General Note Condition **Error! Reference source not found.** (*Contractual acknowledgment of bail-in in respect of French Law Notes issued by GSI*).

(i) ***Risks relating to GSI's reliance on GSG and other Group affiliates***

GSI is reliant on GSG and other Group affiliates for client business, various services and capital. GSI is a wholly-owned subsidiary of GSG. As a wholly-owned subsidiary, GSI relies on various business relationships of GSG and other Group affiliates generally, including the ability to receive various services, as well as, in part, the capital and liquidity of GSI's ultimate parent, GSG, as well as the liquidity of Funding IHC. Although GSI has taken steps to reduce its reliance on other Group affiliates, it remains an operating subsidiary of a larger organisation and therefore its interconnectedness within the organisation will continue. Because GSI's business relies upon GSG and other Group affiliates to a significant extent, risks that could affect these entities could also have a significant impact on GSI.

Furthermore, GSI relies upon certain Group affiliates for various support services, including, but not limited to, trade execution, relationship management, settlement and clearing, risk management and other technical, operational and administrative services. Such services are provided to GSI pursuant to the intercompany services agreement, which is generally terminable upon mutual agreement of GSG and its subsidiaries, subject to certain exceptions, including material breach of the agreement.

As a consequence of the foregoing, in the event GSI's relationships with other Group affiliates are not maintained, for any reason, including as a result of possible strategic decisions that GSG may make from time-to-time or as a result of material adverse changes in GSG's performance, GSI's net revenues may decline, the cost of operating and funding its business may increase and GSI's business, financial condition and profitability may be materially and adversely affected.

Furthermore, GSI receives a portion of its funding in the form of unsecured funding indirectly from GSG and from Funding IHC, and collateralised financings from other Group affiliates. To the extent such funding is not available to GSI, its growth could be constrained and/or its cost of funding could increase.";

(b) Risk factor 5.5(a)(ii) (*No assurance can be given that the methodology underlying each Relevant Index will be successful in producing positive returns or that such Relevant Index will outperform any other alternative investment strategy*) (as amended by Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021) on page 64 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(ii) ***No assurance can be given that the methodology underlying each Relevant Index will be successful in producing positive returns or that such Relevant Index will outperform any other alternative investment strategy***

None of the index sponsor, the Hedging Party, the Strategy Calculation Agent or the Index Calculation Agent or any of their respective affiliates make any express or implied representation that a Relevant Index will achieve a positive performance, or a higher performance than any other index or strategy, or returns independent of the overall direction of the relevant markets, whether managed or not managed.

The value of a Relevant Index depends on the performance of the Strategy Component(s), each of which may increase or decrease in value. Neither a Relevant Index nor any of the Strategy Component(s) includes any element of capital protection or guaranteed return. The value of any Strategy Component or a Relevant Index itself, may fall to zero.

If a floor is specified to be applicable in respect of a Relevant Index and the value of such Relevant Index falls to zero, then the value of such Relevant Index will remain at zero and there will be no chance of the value recovering. If no floor is specified to be applicable in respect of a Relevant Index, then the value of such Relevant Index may fall below zero and have a negative value. In each case, this may result in any investment in Securities linked solely to the relevant Proprietary Index losing all of its value.

Furthermore, it should be noted that the results that may be obtained from investing in any Securities linked to a Proprietary Index may be significantly different from the results that could theoretically be obtained from a direct investment in the Strategy Component(s) or any related derivatives.";

(c) Risk factor 5.5(a)(vii) (*An investor in Securities linked to a Proprietary Index will have no rights in respect of any Strategy Component(s)*) on page 65 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(vii) ***An investor in Securities linked to a Proprietary Index will have no rights in respect of any Strategy Component(s)***

The investment exposure provided by a Relevant Index is synthetic, and a notional investment in a Relevant Index does not constitute a purchase or other acquisition or assignment of any interest in any Strategy Component (or any components thereof). Investment in Securities linked to a Proprietary Index will therefore not make an investor a holder of, or give an investor a direct investment position in, any Strategy Component (or any components thereof). The return on your Securities may be less than if you held a direct position in a Relevant Index or any Strategy Component (or any components thereof), or a different product linked thereto.";

(d) Risk factor 5.5(a)(x) (*Changes in the Strategy Components may affect the Strategy Value*) on page 66 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(x) ***Changes in the Strategy Components or Input Data may affect the Strategy Value***

Where a Strategy Component or Input Data ceases to exist or is no longer tradable, including as a result of a Goldman Sachs Group member discontinuing a Strategy Component of which it is a sponsor or discontinuing to act as a provider of Input Data, or where the index sponsor would be prevented from entering into transactions in respect of a Strategy Component (including one for which a Goldman Sachs Group member is the sponsor) or Input Data by any applicable law or regulation, the index sponsor may (but is not obliged to) substitute another Strategy Component or other Input Data for the original Strategy Component or Input Data where it considers in its sole discretion that a similar alternative is available. Any such substitution could alter the exposure provided by a Relevant Index and materially affect the performance and value of such Relevant Index.";

(e) Risk factor 5.5(a)(xvi) (*The index sponsor and any calculation agent may rely upon third party and other external and internal data sources which may be inaccessible and/or inaccurate, and the inputs used by the index sponsor and any calculation agent may affect the value of a Relevant Index*) on pages 67 to 68 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(xvi) ***The index sponsor and any calculation agent may rely upon third party and other external and internal data sources which may be inaccessible and/or inaccurate, and the inputs used by the index sponsor and any calculation agent may affect the value of a Relevant Index***

The index sponsor and the Strategy Calculation Agent or Index Calculation Agent, as the case may be, may rely upon third party brokers or external dealers and other external and internal sources to obtain certain inputs necessary to compute the value of a Relevant Index and/or to determine the weights or quantities of the Strategy Components, which may be inaccessible and/or inaccurate and the inputs used by them to compute the value of a Relevant Index may affect the value of such Relevant Index.

The inability of the index sponsor or the Strategy Calculation Agent or Index Calculation Agent, as the case may be, to source necessary data to calculate the relevant formulae of a Relevant Index may affect the value of such Relevant

Index. In addition, the index sponsor and the Strategy Calculation Agent or Index Calculation Agent, as the case may be, make no warranty as to the correctness or completeness of that information and take no responsibility for the accuracy of such data or the impact of any inaccuracy of such data on the value of a Relevant Index, and are not under any obligation to independently verify such data (or to advise any investor in Securities linked to a Proprietary Index of any inaccuracy, omission, mistake or error of which it becomes aware). There can be no assurance that any error or discrepancy on the part of any data source or sponsor will be corrected or revised. Even if any error or discrepancy on the part of any third party data source or sponsor is corrected or revised, neither the index sponsor nor any of its affiliates is under any obligation to incorporate any such correction or revision into the calculation of the Strategy Value of a Relevant Index or the price or level of any Strategy Component. Investors should carefully read and understand the information about the relevant Strategy Components.

Securities linked to a Proprietary Index may be exposed to more or less risk, or perform better or worse, based upon the inputs received from the above sources, than an actual investment in or linked to one or more of the Strategy Components.

No assurance can be given that any model or methodology used by such sources will have a positive effect on the performance of a Relevant Index. Therefore, a Relevant Index may not perform as well as a strategy using alternative sources or sources with a different model or methodology.";

(f) Risk factor 5.5(a)(xviii) (*A Relevant Index may be calculated without reference to corrected data*) on page 68 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(xviii) ***A Relevant Index may be calculated without reference to corrected data***

In the event that the value of any component which is used for the calculation of the weight or quantity (as applicable) of any Strategy Component or Input Data in relation to a Relevant Index is corrected after such time as it is used in such Relevant Index, the index sponsor, or Strategy Calculation Agent or Index Calculation Agent, as the case may be, may not use such corrected value and may instead use the weight or quantity (as applicable) as calculated before such correction. As a result the performance of a Relevant Index may differ from the performance had such corrected values been used, and possibly materially so.";

(g) Risk factor 5.5(a)(xix) (*A Relevant Index may be changed or become unavailable*) on pages 68 to 69 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(xix) ***A Relevant Index may be changed or become unavailable***

The index sponsor shall have the right to alter the methodology used to calculate a Relevant Index or to discontinue publication of the value of a Relevant Index and such event may result in a decrease in the value of or return on any Securities linked to a Proprietary Index. The index sponsor reserves the right to form a Strategy Committee or Index Committee, as the case may be, for the purposes of considering certain changes. Any changes may be made without regard to the interests of a holder of Securities linked to a Proprietary Index.

A permanent cancellation of a Relevant Index or a failure by the index sponsor to calculate or announce the value of a Relevant Index may constitute a disruption event in respect of, and, therefore, may result in a decrease in the value of or return on any, Securities linked to a Proprietary Index or result in the termination or early redemption of such Securities.

Furthermore, the decisions and policies of the index sponsor concerning the calculation of the value of a Relevant Index could affect its value and, therefore, the amount payable over the term of Securities linked to a Proprietary Index and the market value of such Securities. The amount payable on Securities linked to a Proprietary Index and their market value could also be affected if the index sponsor changes these policies.";

(h) The following new risk factor 5.5(a)(xx) (*A Relevant Index may not be a fully diversified portfolio*), is inserted immediately after risk factor 5.5(a)(xix) (*A Relevant Index may be changed or become unavailable*) (as amended by this Prospectus Supplement) on pages 68 to 69 of the Original Base Prospectus:

"(xx) ***A Relevant Index may not be a fully diversified portfolio***

Diversification is generally considered to reduce the amount of risk associated with an investment. A Relevant Index may be concentrated in a particular asset class or sector and there can be no assurance that it will be sufficiently diversified at any time to reduce or minimise risks of volatility. The more concentrated a Relevant Index is in certain asset classes or sectors, the greater degree of volatility the Relevant Index may exhibit, and this could in turn result in an adverse effect on the returns of the Relevant Index.

In addition, certain asset classes or sectors may suffer the same adverse performance following a general downturn or other economic or political event, and this could in turn have an adverse effect on the returns of the Relevant Index.";

(i) Risk factor 5.5(b)(i) (*The reference level of Underlying Funds, Component Stocks or Assets included in a Proprietary Index may be adjusted to take account of potential adjustment events*) (as amended by Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021) on page 69 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(i) ***The reference level of Underlying Funds, Component Stocks or Assets included in a Proprietary Index may be adjusted to take account of net dividend payments and/or potential adjustment events***

Following the determination by the index sponsor that an event has occurred that would have a diluting or concentrative effect in respect of an Underlying Fund, Component Stock or Asset, as the case may be, or following any adjustment to the settlement terms of listed options or futures contracts on such Underlying Fund, Component Stock or Asset, as the case may be, traded on an options or futures exchange, the index sponsor may make an adjustment to account for such effect. The index sponsor may, but need not, determine the appropriate adjustment by reference (amongst other things) to the adjustment in respect of such event made by the other equity market dealers and/or exchanges (including but not limited to the reference exchange for such Underlying Fund, Component Stock or Asset, as the case may be, and options and futures exchanges related to such Underlying Fund, Component Stock or Asset, as the case may be) or quoting services. Such adjustment may have an adverse effect on the performance of the relevant Proprietary Index.

On the date on which a Strategy Component commences trading without the rights to receive a dividend, the reference level of such Strategy Component may be adjusted by the index sponsor with the aim of increasing the level to a value as if the relevant dividend amount, net of tax, had not been declared. When making such adjustment, the index sponsor may assume a notional tax rate in respect of the dividend, which may reduce the increase in the reference level for the relevant Strategy Component. Such tax rates may vary according to changes in tax laws and procedures.";

(j) Risk factor 5.5(b)(ii) (*A Relevant Index may provide short exposure to one or more of the Strategy Components*) on page 69 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(ii) ***A Relevant Index may provide short exposure to one or more of the Strategy Components***

A Relevant Index may specify that the weight of a Strategy Component may be less than zero, i.e. a short position in such Strategy Component. A short position in a Strategy Component means that a Relevant Index will have negative exposure to such Strategy Component and the Strategy Value of such Relevant Index will be negatively affected if the value of such Strategy Component should increase and positively affected if the value of such Strategy Component should decrease. Therefore, investors should be aware that an investment in Securities linked to a Proprietary Index may decline in value in a period, even if the value of such Strategy Component increases during that timeframe. Further, given that short positions may create exposure to uncapped losses, increases in the value of such Strategy Component could result in a decrease in the Strategy Value that is greater than the weight in respect of such Strategy Component, and may result in the Strategy Value falling to zero or even to a negative value.";

(k) Risk factor 5.5(b)(v) (*Some index parameters may be partially based on simulated data*) on page 70 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(v) ***Some index parameters may be partially based on simulated data***

Some parameters of a Relevant Index may have been determined by reference to simulated time series data which start before the Strategy Inception Date, as the case may be, for such Relevant Index. Such simulated data are based on various assumptions, do not reflect actual trading and are subject to various market data limitations. As a result, the performance of the simulated time series data may differ from the actual historical performance of a Relevant Index and this difference may be material. The future performance of a Relevant Index will depend, among other things, on the choice of the parameters as described in the relevant Index Rules. As such, the performance of such Relevant Index could be materially different if the relevant parameters were determined based on the actual performance of such Relevant Index rather than based on simulated time series data.";

(l) Risk factor 5.5(b)(vii) (*The changes in the policies of a sponsor of a Strategy Component or a cancellation, discontinuation or suspension of a Strategy Component could affect the value of a Relevant Index*) which had been included pursuant to Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021 is deleted in its entirety and replaced with the following:

"(vii) ***The changes in the policies of a sponsor of a Strategy Component or a cancellation, discontinuation or suspension of a Strategy Component could affect the value of a Relevant Index***

The policies of a sponsor concerning the calculation of the value of a Strategy Component, or additions, deletions or substitutions of Strategy Components and other changes affecting Strategy Components could affect the Strategy Value of a Proprietary Index and Securities linked to such Proprietary Index. The Strategy Value could be affected if the relevant sponsor changes these policies, for example, by changing the manner in which it calculates the value of the Strategy Component, or if the sponsor discontinues or suspends calculation or publication of the value of the Strategy Component, in which case it may become difficult to determine the Strategy Value.";

(m) Risk factor 5.5(b)(ix) (*A Relevant Index is not actively managed*) which had been included pursuant to Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021 is deleted in its entirety and replaced with the following:

"(ix) ***A Relevant Index may not be actively managed***

The weight or quantity assigned to a Strategy Component on each relevant rebalancing day may be determined by applying an algorithm operating within pre-determined rules. There may be no active management of a Relevant Index so as to enhance returns beyond those embedded in a Relevant Index.

Market participants are often able to adjust their investments promptly in view of market, political, financial or other factors, and an actively managed product could potentially respond more directly and appropriately to immediate market, political, financial or other factors than a non-actively managed strategy. In contrast, the algorithm for a Relevant Index may rebalance the weights or quantities to their specified values on each relevant rebalancing day. No assurance can be given that a Relevant Index will replicate or outperform a comparable strategy which is actively managed and the return on a Relevant Index may be lower than the return on an actively managed strategy.";

(n) The following new risk factors 5.5(b)(x) (*The negative performance of one or more Strategy Components may outweigh the positive performance of other Strategy Components*) and 5.5(b)(xi) (*Prices of relevant underlying indices, financial instruments or assets constituted in a Strategy Component may be volatile*) are inserted immediately after risk factor 5.5(b)(ix) (*A Relevant Index may not be actively managed*) (as amended by this Prospectus Supplement) which had been included pursuant to Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021:

"(x) ***The negative performance of one or more Strategy Components may outweigh the positive performance of other Strategy Components***

The value of a Relevant Index may go up or down depending on the overall performance of each Strategy Component. The negative performance of one or more positively weighted Strategy Components (and/or the positive performance of one or more negatively weighted Strategy Components) may outweigh the positive performance of other positively weighted Strategy Components (and/or the negative performance of one or more negatively weighted Strategy Components). Even in the case of a positive performance of one or more Strategy Components, the value of a Relevant Index as a whole may go down if the performance of the other Strategy Components is negative to a greater extent.

(xi) ***Prices of relevant underlying indices, financial instruments or assets constituted in a Strategy Component may be volatile***

The value of a Strategy Component may be derived in whole or in part from the value of certain underlying indices, financial instruments or assets. The prices or levels of such underlying indices, financial instruments or assets may be volatile, with price movements being influenced by a multitude of factors, including, but not limited to, supply and demand, applicable market conditions, government policies and programmes, political and economic events and rates of inflation, currency devaluations and revaluations, and sentiment in the relevant market. This may make the value of a Strategy Component volatile, which may in turn make the value of a Relevant Index volatile.";

(o) Risk factor 5.5(d)(ii) (*As some Component Stocks may not be denominated in the Index Currency, a Single Stock Static Basket Index may be subject to currency exchange rate risks*) on page 76 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(ii) ***A Single Stock Static Basket Index may be subject to currency exchange rate risks***

A Single Stock Static Basket Index may be subject to currency exchange rate risks.

Each Single Stock Static Basket Index is calculated in the Index Currency. While some of the Component Stocks may be denominated in the Index Currency, a Single Stock Static Basket Index may also comprise Component Stocks denominated in other currencies. A Single Stock Static Basket Index may therefore be exposed to currency exchange rate risks. The relevant Single Stock Static Basket Index will notionally convert the value of such Component Stocks into its Index Currency at prevailing exchange rates for purposes of determining the Strategy Value. The exposure of these Component Stocks to movements in currency exchange rates will depend on the extent to which such currencies strengthen or weaken against the Index Currency and the relative weighting of such Component Stocks. Currency exchange rates vary over time, and changes in a particular currency exchange rate result from the interaction of many factors directly or indirectly affecting economic or political conditions, including rates of inflation, interest rate levels, balances of payment among countries, the extent of governmental surpluses or deficits and other financial, economic, military and political factors, among others.

If "FX Hedge" is applicable to a Single Stock Static Basket Index, the Strategy Value will be adjusted to hedge the currency exposures of the Single Stock Static Basket Index using notional currency forward rates, i.e. rates of exchange for the relevant currencies on future dates. Such adjustment shall reduce but not eliminate foreign exchange risk. Increases or decreases in the levels of the relevant currency forward rates will lead to an increase or decrease (as applicable) in the level of a Single Stock Static Basket Index. The value of any Securities linked to such Single Stock Static Basket Index may consequently be affected by movements in the relevant currency forward rates.";

(p) Risk factor 5.5(d)(iii) (*Index Inception Date*) on page 76 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(iii) [deleted]";

(q) Risk factor 5.5(d)(iv) (*Gains from an investment linked to a Single Stock Static Basket Index will be adjusted by deductions included in the calculation of the value of such Single Stock Static Basket Index*) on pages 76 to 77 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(iv) ***Gains from an investment linked to a Single Stock Static Basket Index will be adjusted by deductions included in the calculation of the value of such Single Stock Static Basket Index***

Notional embedded costs will be included within a Single Stock Static Basket Index and will reduce the level of such Single Stock Static Basket Index.

Such amounts will be deducted from the performance of a Single Stock Static Basket Index with the intention of synthetically reflecting transaction costs (including, but not limited to, any applicable stamp duty payments, financial transaction taxes, brokerage costs, and/or other fees and expenses) that would be incurred by a hypothetical investor if it were to enter into actual transactions to provide the same exposure to the Component Stocks as such Single Stock Static Basket Index. Such transaction costs are linked to the magnitude and frequency of changes to the number of shares of the Component Stocks included in the Stock Basket and are made only as a result of a rebalancing of the Stock Basket. Deductions representing such transaction costs may be significant if there is a high turnover of Component Stocks in the Stock Basket and the change in the actual exposure of the Single Stock Static Basket Index to the relevant Component Stocks is large, which could result in a material negative impact on the performance of a Single Stock Static Basket Index.

The notional transaction costs reflected in the calculation of a Single Stock Static Basket Index are calculated by reference to pre-determined transaction cost rates and do not necessarily reflect the actual or realised transaction costs that would be incurred by an investor in the relevant Component Stocks, which could be larger or smaller from time to time. The index sponsor (or its affiliates) that has hedged its exposure to the Component Stocks will benefit if such actual or realised costs are less than the notional transaction costs in respect of such Single Stock Static Basket Index. Any such benefit will not be passed on to investors in Securities linked to such Single Stock Static Basket Index. It is possible that such actual or realised costs may be lower than the said notional transaction costs.

The value of a Single Stock Static Basket Index may also be reduced by an amount calculated at a fixed rate specified in the rules of such Single Stock Static Basket Index. In addition, the value of a Single Stock Static Basket Index may be reduced by further deductions if so specified in the relevant Index Rules.";

(r) Risk factor 5.5(d)(v) (*Potential amendment to the methodology of a Single Stock Static Basket Index or replacement of a Single Stock Static Basket Index*) on page 77 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(v) ***Potential amendment to the methodology of a Single Stock Static Basket Index or replacement of a Single Stock Static Basket Index***

If the index sponsor determines that the aggregate notional or principal amount of Securities linked to a Single Stock Basket Index is above a certain threshold it may (a) change the methodology of such Single Stock Static Basket Index so that the rebalancing of such Single Stock Static Basket Index is executed over one or more additional business days or that the frequency of rebalancing of such Single Stock Static Basket Index is changed, (b) replace such Single Stock Static Basket Index with a replacement index which will be identical in all material respects other than the day or days on which the relevant index is rebalanced and/or (c) make such other adjustments to such Single Stock Static Basket Index, in each case, in order to enable the index sponsor and/or any affiliate to be able to effectively hedge its exposure to such Single Stock Static Basket Index and/or to reduce the expected impact of such hedging transactions on the relevant markets. Although such amendments or such replacement would be designed to minimise potential market impact, the performance of a Single Stock Static Basket Index may be affected by such amendments or replacement, potentially materially so.";

(s) Risk factor 5.5(d)(vii) (*Exchange closed on Observation Days and Rebalancing Days*) (as amended by Prospectus Supplement No. 2 to the Original Base Prospectus dated 21 August 2020) on pages 77 to 78 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"(vii) ***Exchanges closed on Observation Days and Rebalancing Days***

The universe of potential Component Stocks may be broad and cover multiple jurisdictions and stock exchanges. Therefore, in relation to a Single Stock Static Basket Index that references a large pool of potential Component Stocks, it may be that on any Observation Day and/or Rebalancing Day the primary exchanges for a significant proportion of the Component Stocks included in the Stock Basket are closed. Where the relevant primary exchange for a Component Stock is closed, the relevant Single Stock Static Basket Index may use the previous closing price (or such other price as determined by the index sponsor) for such Component Stock. As a result, previous closing prices (or other alternative prices) may be used for a significant proportion of the universe of potential stocks when calculating the Strategy Value. This may impact the performance of a Single Stock Static Basket Index as compared to a methodology that requires all exchanges to be open on an Observation Day and/or a Rebalancing Day.";

(t) Risk factor 5.5(d)(x) (*A Single Stock Static Basket Index is not actively managed*) which had been included pursuant to Prospectus Supplement No. 2 to the Original Base Prospectus dated 21 August 2020 is deleted in its entirety and replaced with the following:

"(x) ***A Single Stock Static Basket Index is not actively managed***

The quantity assigned to a Component Stock on each Rebalancing Day is determined by applying an algorithm operating within pre-determined rules. There will be no active management of a Single Stock Static Basket Index so as to enhance returns beyond those embedded in such Single Stock Static Basket Index.

Market participants are often able to adjust their investments promptly in view of market, political, financial or other factors, and an actively managed product could potentially respond more directly and appropriately to immediate market, political, financial or other factors than a non-actively managed strategy. In contrast, the algorithm for a Single Stock Static Basket Index will rebalance the quantities to their specified values on each Rebalancing Day. No assurance can be given that a Single Stock Static Basket Index will replicate or outperform a comparable strategy which is actively managed and the return on a Single Stock Static Basket Index may be lower than the return on an actively managed strategy.";

(u) The following new risk factors 5.5(d)(xi) (*Reliance on the Index Calculation Agent Methodology*), 5.5(d)(xii) (*An investment in a Single Stock Static Basket Index may be subject to leverage, which may increase the risk of such investment*) and 5.5(d)(xiii) (*At any given time, the Component Stock universe of a Single Stock Static Basket Index may include underliers that are on the "restricted trading list" of Goldman Sachs, and that may adversely affect the performance of a Single Stock Static Basket Index*) are inserted immediately after risk factor 5.5(d)(x) (*A Single Stock Static Basket Index is not actively managed*) (as amended by this Prospectus Supplement) which had been included pursuant to Prospectus Supplement No. 2 to the Original Base Prospectus dated 21 August 2020:

"(xi) ***Reliance on the Index Calculation Agent Methodology***

A Single Stock Static Basket Index relies on the Index Calculation Agent Methodology specified in the Index Rules to determine, amongst other things, how corporate actions are applied to the Component Stocks. Using a different methodology could lead to different outcomes and as such, any changes to the Index Calculation Agent Methodology could have a material impact on a Single Stock Static Basket Index.

If the Index Calculation Agent Methodology is determined by reference to a third party methodology, the index sponsor may not be able to influence changes to such Index Calculation Agent Methodology. However, the index sponsor may replace such Index Calculation Agent Methodology from time to time (including, without limitation, creating a new methodology to determine corporate actions and the relevant adjustments), and such replacement could have a material impact on the performance of a Single Stock Static Basket Index.

(xii) ***An investment in a Single Stock Static Basket Index may be subject to leverage, which may increase the risk of such investment***

A Single Stock Static Basket Index's absolute overall exposure to the Component Stocks may be greater or less than 100 per cent.

If the sum of the absolute weights of the Component Stocks is greater than 100 per cent., the Single Stock Static Basket Index will employ leverage. In this instance, leverage means that the Single Stock Static Basket Index will have increased exposure to changes, which may be positive or negative, in the prices of the Component Stocks, magnifying the volatility and risk. The performance of the Single Stock Static Basket Index will be adversely affected should the value of "long" Component Stocks decrease.

If the sum of the absolute weights of the Component Stocks is less than 100 per cent., the Single Stock Static Basket Index will have a reduced participation in the Component Stocks and may underperform as compared to a Relevant Index where the exposure was greater.

(xiii) ***At any given time, the Component Stock universe of a Single Stock Static Basket Index may include underliers that are on the "restricted trading list" of Goldman Sachs, and that may adversely affect the performance of a Single Stock Static Basket Index***

As part of its activities as a full-service global financial institution, Goldman Sachs may from time to time place companies on its internal "restricted trading list". If so specified in the relevant Index Rules, where a company is placed on such list as a result of a potential restriction on Goldman Sachs' ability to principally transact in the stock or options of such company, its shares may be disqualified as a member of the Component Stock universe of a Single Stock Static Basket Index. This disqualification may adversely affect the performance of a Single Stock Static Basket Index.";

(v) The first paragraph under risk factor 5.5(e) (*Specific risks associated with the Goldman Sachs Fund Basket Strategies*) which had been included pursuant to Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021 is deleted in its entirety and replaced with the following:

"*Securities may be linked to the Goldman Sachs Fund Basket Strategies (for the purposes of the risk factors set out under this sub-category and risk factor 7.11, each, a "**Fund Basket Strategy**" and together, the "**Fund Basket Strategies**"). Each Fund Basket Strategy seeks to provide a synthetic exposure to the performance of a dynamically weighted basket (the "**Basket**") of underlying funds (each, an "**Asset**"). For the purposes of a Fund Basket Strategy, a "**Strategy Component**" shall mean an Asset or the Money Market Index*.";

(w) Risk factor 5.5(e)(i) (*A Fund Basket Strategy's absolute overall exposure to the Assets may be greater or less than 100 per cent.*) which had been included pursuant to Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021 is deleted in its entirety and replaced with the following:

"(i) ***The weights of the Assets may total more or less than 100 per cent.***

A Fund Basket Strategy's absolute overall exposure to the Assets may be greater or less than 100 per cent.

If the sum of the absolute weights of the Assets is greater than 100 per cent., the Fund Basket Strategy will employ leverage. In this instance, leverage means that the Fund Basket Strategy will have increased exposure to changes, which may be positive or negative, in the levels of the Assets, magnifying volatility and the risk of the performance of the Fund Basket Strategy being adversely affected should the level of the Assets decrease.

If the sum of the absolute weights of the Assets is less than 100 per cent., the Fund Basket Strategy will have a reduced participation in the Assets and may underperform as compared to a Relevant Index where the exposure was greater."; and

(x) Risk factor 7.11 (*Additional conflicts of interests associated with Securities linked to a Proprietary Index*) (as amended by Prospectus Supplement No. 7 to the Original Base Prospectus dated 1 February 2021) on pages 100 to 103 of the Original Base Prospectus is deleted in its entirety and replaced with the following:

"7.11 **Additional conflicts of interests associated with Securities linked to a Proprietary Index**

Potential conflicts of interest may arise in relation to Goldman Sachs' multiple roles in connection with a Proprietary Index. Although the Goldman Sachs Group will perform its obligations in a manner that it considers commercially reasonable, it may face conflicts between the roles it performs in respect of a Proprietary Index and its own interests. In particular, the Goldman Sachs Group may have, or enter into transactions to create, a physical, economic or other interest (including an adverse and/or short interest, as the case may be) in a Relevant Index, products linked thereto, any Strategy Component, any Input Data and/or investments referenced by or linked to any Strategy Component or Input Data, and may exercise remedies or take other action with respect to its interests as it deems appropriate. These actions could adversely affect the Strategy Value and may include the following:

(i) The Goldman Sachs Group actively trades products linked to each Relevant Index, any Strategy Component, Input Data, investments referenced by or linked to a Strategy Component or Input Data and numerous related investments. These activities could adversely affect the Strategy Value, which could in turn affect the return on, and the value of, Securities linked to a Proprietary Index.

(ii) The Goldman Sachs Group may have access to information relating to a Relevant Index, products linked thereto, a Strategy Component, Input Data or investments referenced by or linked to a Strategy Component or Input Data. The Goldman Sachs Group is not obliged to use that information for the benefit of any person acquiring or entering into Securities linked to a Proprietary Index.

(iii) Certain activities conducted by the Goldman Sachs Group may conflict with the interests of those acquiring Securities linked to a Proprietary Index. It is possible that the Goldman Sachs Group could receive substantial returns in respect of these activities while the value of any investment referenced to such Proprietary Index may decline. For example:

(a) The Goldman Sachs Group and other parties may issue or underwrite additional securities or trade other financial or derivative instruments or investments referenced to a Relevant Index or other similar strategies or any Strategy Component. An increased level of investment and trading in these securities, instruments or investments may negatively affect the performance of a Relevant Index and could affect the Strategy Value of a Relevant Index and, therefore, the amount payable at maturity (or on any other payment date) on Securities linked to a Proprietary Index and the value before maturity of such Securities. Such securities, instruments or investments may also compete with Securities linked to a Proprietary Index. By introducing competing products into the marketplace in this manner, the Goldman Sachs Group could adversely affect the market value of Securities linked to a Proprietary Index and the amount paid by it on such Securities at maturity (or on any other payment date). To the extent that the Goldman Sachs Group serves as issuer, agent, underwriter or counterparty in respect of those securities or other similar instruments or investments, its interests in respect of those securities, instruments or investments may be adverse to the interests of a holder of Securities linked to a Proprietary Index.

(b) Although the Goldman Sachs Group is not obliged to do so, it may elect to hedge its exposure to a Relevant Index, any products linked thereto, a Strategy Component, Input Data or any investment referenced by or linked to a Strategy Component or Input Data with an affiliate or a third party. That affiliate or third party, in turn, is likely to directly or indirectly hedge some or all of its exposure, including through transactions taking place on the futures and options markets. Where the Goldman Sachs Group chooses to hedge its exposure, it may adjust or unwind such hedges by purchasing or selling products linked to a Relevant Index, a Strategy Component, Input Data, any investments referenced by or linked to a Strategy Component or Input Data, or any other product on or before the date such Relevant Index is valued for purposes of any investments referenced to such Relevant Index. The Goldman Sachs Group may also enter into, adjust or unwind hedging transactions relating to other instruments linked to a Relevant Index or a Strategy Component, including at times and/or levels which are different from those used to determine the Strategy Value. Any of this hedging activity may adversely affect the Strategy Value of a Relevant Index and the value of any Securities linked to a Proprietary Index. In addition, and without limitation:

(I) The Goldman Sachs Group could receive substantial returns with respect to these hedging activities while the Strategy Value of a Relevant Index and/or the value of Securities linked to a Proprietary Index may decline.

(II) The Goldman Sachs Group could receive substantial returns if it trades in a Strategy Component on or before the rebalancing of a Relevant Index and/or at levels which are different from the levels specified in the methodology for determining the Strategy Value of a Relevant Index. Such trading may have an adverse impact on the level at which a rebalancing occurs, which may result in an adverse impact on the performance of a Relevant Index. In addition, such trading could generate significant returns to the Goldman Sachs Group that will not be passed on to the investors in Securities linked to a Proprietary Index.

(III) In respect of Securities linked to the Strategy or a Fund Basket Strategy, to the extent that the Hedging Party or any affiliate may hold a physical position in an Underlying Fund or an Asset (as the case may be), the Hedging Party may receive payments by way of fee rebates from the manager, the investment advisor and/or an affiliate of the relevant Underlying Fund or Asset (as the case may be) linked to the size of such holding. Such fee rebates will not be included in the costs applied to the Underlying Strategy, the Strategy or the Fund Basket Strategy (as the case may be) but the benefit of any rebate will benefit the Hedging Party and will have an impact on the pricing of Securities linked to the Strategy or the Fund Basket Strategy (as the case may be).

(IV) If the Goldman Sachs Group has hedged its exposure to a Strategy Component or Input Data and incurs an effective rate of withholding tax that is less than the synthetic tax withholding applied in respect of a Relevant Index, the Goldman Sachs Group could receive substantial returns.

(c) Certain activities conducted by the Goldman Sachs Group may conflict with the interests of those acquiring Securities linked to a Proprietary Index. For example, as described above, the Goldman Sachs Group may elect to hedge its obligations, if any, with an affiliate or a third party. It is possible that the Goldman Sachs Group could receive substantial returns with respect to these activities irrespective of the performance of a Proprietary Index and including while the value of any investment in Securities linked to such Proprietary Index may decline.

(d) The Goldman Sachs Group may also engage in trading for its proprietary accounts, for other accounts under its management or to facilitate transactions, including block transactions, on behalf of customers relating to one or more products linked to a Relevant Index, a Strategy Component or any constituent thereof, Input Data and/or any investment referenced by or linked to a Strategy Component or any constituent thereof or Input Data. In the course of these transactions, the Goldman Sachs Group's customers may receive information about a Relevant Index before it is made available to other investors. Any of these activities could also adversely affect the Strategy Value of such Relevant Index directly or indirectly by affecting the level of a Strategy Component or any constituent thereof, Input Data or the investments referenced by or linked to a Strategy Component or any constituent thereof or Input Data and, therefore, the market value of Securities linked to the relevant Proprietary Index and the amount paid on any such Securities at maturity.

(iv) As operator or sponsor of a Relevant Index, under certain circumstances GSI will have discretion in making various determinations that affect a Relevant Index and products linked to it including, but not limited to, those situations described in the relevant Index Rules. GSI may use these determinations to calculate how much cash it must pay at maturity, or, as the case may be, upon any early redemption or on any other payment date, of Securities linked to a Proprietary Index. The exercise by GSI of this discretion could adversely affect the Strategy Value of such Proprietary Index and the value of Securities linked to it. It is possible that the exercise by the index sponsor of its discretion to change the relevant methodology may result in substantial returns in respect of the Goldman Sachs Group's trading activities for its proprietary accounts, for other accounts under its management or to facilitate transactions on behalf of customers relating to one or more products linked to a Relevant Index, the Strategy Components or Input Data thereof or any investment referenced by or linked to such Strategy Components or Input Data.

(v) In respect of Securities linked to the Strategy or a Fund Basket Strategy, following the occurrence of an Additional Market Disruption Event in respect of one or more Underlying Funds or Assets (as the case may be), the Strategy Sponsor may, acting in good faith and a commercially reasonable manner, determine appropriate amendments to or make certain discretionary determinations in respect of the Underlying Strategy or Fund Basket Strategy (as the case may be). The amendments and/or determinations made by the Strategy Sponsor may result in a material loss of Strategy Value and may benefit the Hedging Party in its capacity as issuer of, or counterparty to, Securities linked to the Strategy or Fund Basket Strategy (as the case may be) and, consequently, lead to a conflict of interest.

(vi) As operator or sponsor of one or more Strategy Components or as a provider of Input Data, the Goldman Sachs Group members may be entitled to exercise discretion over decisions that would have an adverse impact on the Strategy Value of a Relevant Index, including, without limitation, discontinuing publication of the level of one or more Strategy Components or Input Data. The Goldman Sachs Group members will exercise any such discretion without regard to a Relevant Index or investors in Securities linked to the relevant Proprietary Index.

(vii) The Goldman Sachs Group may in the future create and publish other indices or strategies, the concepts of which are similar, or identical, to that of a Relevant Index or one or more of the Strategy Components. The Strategy Component(s), as specified in the relevant Index Rules, however, are the only components that will be used for the calculation of the Relevant Index. Accordingly, no other published indices should be treated by any investor as the level of any Strategy Component (except as the Strategy Sponsor or any calculation agent may so determine, as described above).

(viii) The Goldman Sachs Group may publish research, express opinions or provide recommendations (for example, with respect to a Strategy Component) that are inconsistent with investing in Securities linked to a Proprietary Index, and which may be revised at any time. Any such research, opinions or recommendations may or may not recommend that investors buy or hold the relevant Strategy Component and could affect the value and or performance of the relevant Proprietary Index and of Securities linked to such Proprietary Index.

(ix) The Goldman Sachs Group may have ownership interests in sponsors of Strategy Components and as such may be able to influence the methodology and other features of such Strategy Components. In addition, members of the Goldman Sachs Group may provide pricing or other data that is directly used in the calculation of the level, value, coupon and/or components of Strategy Components (or the components thereof) or may be a provider of Input Data. The activities of the Goldman Sachs Group members as contributor to any Strategy Components or providers of Input Data may be adverse to the interests of investors and/or counterparties to products linked to any such Strategy Components or Input Data and may have an impact on the performance of such Strategy Components or Input Data.

(x) The Goldman Sachs Group may have ownership interests in any Strategy Calculation Agent (or any other calculation agent with respect to a Relevant Index or Strategy Component) and any third party data providers with respect to a Relevant Index or any Strategy Component or Input Data and as such may be able to influence the determinations of such a calculation agent. In addition, members of the Goldman Sachs Group may provide pricing or other data that is directly used in the calculation of the level, coupon and/or components of a Relevant Index or may be providers of Input Data. The activities of the Goldman Sachs Group members as contributor to a Relevant Index may be adverse to the interests of investors in and/or counterparties to Securities linked to a Proprietary Index and may have an impact on the performance of such Proprietary Index.".

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 "*The Goldman Sachs International*" on pages 105 to 106 of the Original Base Prospectus in its entirety and replacing it with the following:

"1. **The 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 31 December 2020 of GSI ("**GSI's 2020 Annual Report**"), containing, in Part II, the Directors' Report and Audited Financial Statements of GSI for the period ended 31 December 2020 ("**GSI's 2020 Financial Statements**") (accessible on https://www.goldmansachs.com/investor-relations/financials/current/subsidiary-financial-info/gsi/12-31-20-financial-statements.pdf);

(b) The Unaudited Quarterly Financial Report of GSI for the period ended 31 August 2020 ("**GSI's 2020 Third Quarter Financial Report**"), containing, in Part II, the Unaudited Financial Statements of GSI for the period ended 31 August 2020 ("**GSI's 2020 Third Quarter Financial Statements**") (accessible on https://www.goldmansachs.com/investor-relations/redirects/gsi-08-31-20-financial-statements.html);

(c) The Unaudited Quarterly Financial Report of GSI for the period ended 31 May 2020 ("**GSI's 2020 Second Quarter Financial Report**"), containing, in Part II, the Unaudited Financial Statements of GSI for the period ended 31 May 2020 ("**GSI's 2020 Second Quarter Financial Statements**") (accessible on https://www.goldmansachs.com/investor-relations/redirects/gsi-05-31-20-financial-statements.html);

(d) The Unaudited Quarterly Financial Report of GSI for the period ended 29 February 2020 ("**GSI's 2020 First Quarter Financial Report**"), containing, in Part II, the Unaudited Financial Statements of GSI for the period ended 29 February 2020 ("**GSI's 2020 First Quarter Financial Statements**") (accessible on https://www.goldmansachs.com/investorrelations/redirects/gsi-02-29-20-financial-statements);

(e) The Annual Report for the fiscal year 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**") (accessible on https://www.goldmansachs.com/investor-relations/redirects/gsi-11-30-19-financialstatements);

(f) The report on the Regulatory Ratios of GSI for the fiscal quarter ended 31 December 2019 ("**GSI's Regulatory Ratios, 31 December 2019**") (accessible on https://www.goldmansachs.com/disclosures/pdfs/gsi-regulatory-ratios-31-dec-2019.pdf); and

(g) 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**") (accessible on https://www.goldmansachs.com/investor-relations/redirects/gsi-11-30-18-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 105 to 106 of the Original Base Prospectus and replacing it with the following:

"**Cross-Reference List**

GSI Information in the Fiscal Statement	**GSI's 2020 Annual Report**	**GSI's 2020 First Quarter Financial Report**	**GSI's 2019 Annual Report**	**GSI's 2018 Annual Report**

Management Report/ Strategic Report	pp. 2-47	pp. 2-16	pp. 2-41	pp. 2-41
Report of the Directors	pp. 48- 54	N/A	pp. 42-43	pp. 42-43
Balance Sheet	p. 63	p. 18	p. 51	p. 50
Profit and Loss Account / Income Statement	p. 62	p. 17	p. 50	p. 49
Statement of Cash Flows	p. 65	p. 20	p. 53	p. 52
Notes to the Financial Statements	p. 66-112	pp. 21-39	pp. 54-95	pp. 53-94
Independent Auditors' Report	p. 55	N/A	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 this Base Prospectus pursuant to Article 6(1) of the EU Prospectus Regulation and/or UK Prospectus Regulation and is not otherwise required to be included under the relevant schedules of the PR Regulation.)".

(c) deleting sub-section 4 entitled "*The Goldman Sachs Group, Inc.*" on pages 108 to 110 of the Original Base Prospectus in its entirety and replacing it with the following:

"4. **The Goldman Sachs Group, Inc.**

GSG files documents and information with the SEC. The following documents, which have previously been published and filed with the SEC, shall be deemed to be incorporated by reference in, and to form part of, this Base Prospectus:

(a) The Current Report on Form 8-K dated 14 April 2021 for the first fiscal quarter ended 31 March 2021 of The Goldman Sacks Group Inc. ("**GSG's 14 April 2021 Form 8-K**") including Exhibit 99.1 ("**Exhibit 99.1 to GSG's 14 April 2021 Form 8-K**") as filed with the SEC on 14 April 2021 (accessible on website https://www.goldmansachs.com/investor-relations/financials/8k/2021/8k-04-14-21.pdf);

(b) The Proxy Statement relating to GSG's 2021 Annual Meeting of Shareholders on 29 April 2021 ("**GSG's 2021 Proxy Statement**"), as filed with the SEC on 19 March 2020 (accessible on website https://www.goldmansachs.com/investor-relations/financials/current/proxy-statements/2021-proxy-statement-pdf.pdf);

(c) The Annual Report on Form 10-K for the fiscal year ended 31 December 2020 of The Goldman Sachs Group, Inc. ("**GSG's 2020 Form 10-K**"), containing financial statements relating to the fiscal years ended 31 December 2020, 31 December 2019 and 31 December 2018, including Exhibit 21.1, as filed with the U.S. Securities and Exchange Commission on 19 February 2021 (accessible on website https://www.goldmansachs.com/investor-relations/financials/current/10k/2020-10-k.pdf);

(d) The Current Report on Form 8-K dated 19 January 2021 of The Goldman Sachs Group Inc ("**GSG's 19 January 2021 Form 8-K**"), including

Exhibit 99.1 ("**Exhibit 99.1 to GSG's 19 January 2021 Form 8-K**") as filed with the SEC on 19 January 2021 (accessible on website https://www.goldmansachs.com/investor-relations/financials/current/8k/8k-01-19-21.pdf);

(e) The Quarterly Report on Form 10-Q for the third fiscal quarter ended 30 September 2020 of The Goldman Sachs Group, Inc. ("**GSG's 2020 Third Quarter Form 10-Q**"), as filed with the SEC on 30 October 2020 (accessible on website https://www.goldmansachs.com/investor-relations/redirects/third-quarter-2020-10-q.html);

(f) the Current Report on Form 8-K dated 22 October 2020 of The Goldman Sachs Group, Inc. ("**GSG's 22 October 2020 Form 8-K**"), including Exhibit 99.1 ("**Exhibit 99.1 to GSG's 22 October 2020 Form 8-K**") as published by the SEC on 22 October 2020; (accessible on website https://www.goldmansachs.com/investor-relations/redirects/8k-10-22-20.html);

(g) the Current Report on Form 8-K dated 14 October 2020 of The Goldman Sachs Group, Inc. ("**GSG's 14 October 2020 Form 8-K**"), including Exhibit 99.1 ("**Exhibit 99.1 to GSG's 14 October 2020 Form 8-K**") as published by the SEC on 14 October 2020; (accessible on website https://www.goldmansachs.com/investor-relations/redirects/8k-10-14-20.html);

(h) The Quarterly Report on Form 10-Q for the second fiscal quarter ended 30 June 2020 of the Goldman Sachs Group, Inc. ("**GSG's 2020 Second Quarter Form 10-Q**"), as filed with the SEC on 6 August 2020; (accessible on website https://www.goldmansachs.com/investor-relations/financials/current/10q/second-quarter-2020-10-q.pdf);

(i) The Current Report on Form 8-K dated 24 July 2020 of The Goldman Sachs Group Inc. ("**GSG's 24 July 2020 Form 8-K**") including Exhibit 99.1 ("**Exhibit 99.1 to GSG's 24 July 2020 Form 8-K**") as filed with the SEC on 24 July 2020; (accessible on https://www.goldmansachs.com/investor-relations/financials/current/8k/8k-07-24-20.pdf);

(j) The Current Report on Form 8-K dated 15 July 2020 for the second fiscal quarter ended 30 June 2020 of The Goldman Sachs Group Inc. ("**GSG's 15 July 2020 Form 8-K**") including Exhibit 99.1 ("**Exhibit 99.1 to GSG's 15 July 2020 Form 8-K**") as filed with the SEC on 15 July 2020; (accessible on https://www.goldmansachs.com/investor-relations/financials/current/8k/8k-07-15-20.pdf);

(k) The Quarterly Report on Form 10-Q for the first fiscal quarter ended 31 March 2020 of the Goldman Sachs Group, Inc. ("**GSG's 2020 First Quarter Form 10-Q**"), as filed with the SEC on 30 April 2020 2020; (accessible on https://www.goldmansachs.com/investor-relations/redirects/10-q-2020-1q);

(l) The Proxy Statement relating to GSG's 2020 Annual Meeting of Shareholders on 30 April 2020 ("**GSG's 2020 Proxy Statement**"), as filed with the SEC on 20 March 2020; (accessible on https://www.goldmansachs.com/investor-relations/redirects/2020-proxy-statement-pdf); and

(m) The Annual Report on Form 10-K for the fiscal year ended 31 December 2019 of The Goldman Sachs Group, Inc. ("**GSG's 2019 Form 10-K**"), containing financial statements relating to the fiscal years ended 31 December 2019 and 31 December 2018, including Exhibit 21.1, as filed with the SEC on 21 February 2020; (accessible on https://www.goldmansachs.com/investor-relations/redirects/2019-10K).

The following table indicates where information required by the PR Regulation is to be disclosed in, and incorporated by reference into, this Base Prospectus can be found in the documents referred to above:

Information required by the PR Regulation	Document/Location
Risk factors relating to GSG (*Annex 6, Section 3, Item 3.1 of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 26-51, equivalent to pp. 29-54 in the PDF)
Information about GSG	
History and development of the company (*Annex 6, Section 4, Item 4.1 of the PR Regulation*)	GSG's 2020 Form 10-K (p. 1)
Business overview	
GSG's principal activities (*Annex 6, Section 5, Item 5.1 of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 1-5, 120)
GSG's principal markets (*Annex 6, Section 5, Item 5.1.1 (c) of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 1-8, 52, 54-55, 200-201)
Organisational Structure (*Annex 6, Section 6, Items 6.1 and 6.2 of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 32-33, Exhibit 21.1)
Trend information (*Annex 6, Section 7, Items 7.1 and 7.2 of the PR Regulation*)	GSG's 2020 Third Quarter Form 10-Q (pp. 99-160) Exhibit 99.1 to GSG's 22 October 2020 Form 8-K (pp. 5-6) Exhibit 99.1 to GSG's 14 April 2021 Form 8-K GSG's 2020 Form 10-K (pp. 53-111) GSG's 2020 Second Quarter Form 10-Q (pp. 99-160)
Expected financing of GSG's activities (*Annex 6, Item 4, Item 4.1.8 of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 116-119, 144-158)
Administrative, management and supervisory bodies, including conflicts of interest (*Annex 6, Section 9, Items 9.1 and 9.2 of the PR Regulation*)	GSG's 2021 Proxy Statement (pp. 1, 5, 9-30, 91-94)

Beneficial owners of more than five per cent. (*Annex 6, Section 10, Item 10.1 of the PR Regulation*)	GSG's 2021 Proxy Statement (p. 97)
Financial information	
Audited historical financial information for the fiscal years ended 31 December 2020, 31 December 2019, and 31 December 2018 (*Annex 6, Section 11, Items 11.1.1 and 11.1.5 of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 105-218)
Audit report (*Annex 6, Section 11, Item 11.1.1 of the PR Regulation*)	GSG's 2020 Form 10-K (p. 113-115)
Balance sheet (*Annex 6, Section 11, Item 11.1.5 of the PR Regulation*)	GSG's 2020 Form 10-K (p. 117)
Income statement (*Annex 6, Section 11, Item 11.1.5 of the PR Regulation*)	GSG's 2020 Form 10-K (p. 116)
Cash flow statement (*Annex 6, Section 11, Item 11.1.5 of the PR Regulation*)	GSG's 2020 Form 10-K (p. 119)
Accounting policies and explanatory notes (*Annex 6, Section 11, Item 11.1.5 of the PR Regulation*)	GSG's 2020 Form 10-K (pp. 55-57, 120-218)
Unaudited interim and other financial information (*Annex 6, Section 11, Item 11.2.1 of the PR Regulation*)	GSG's 2020 Third Quarter Form 10-Q (pp. 1-98)
Balance sheet (*Annex 6, Section 11, Item 11.2.1 of the PR Regulation*)	Exhibit 99.1 to GSG's 14 April 2021 Form 8-K (p.9)
	GSG's 2020 Third Quarter Form 10-Q (p. 2)
	Exhibit 99.1 to GSG's 14 October 2020 Form 8-K (p. 16)
	GSG's 2020 Second Quarter Form 10-Q (p. 2)
Income statement (*Annex 6, Section 11, Item 11.2.1 of the PR Regulation*)	Exhibit 99.1 to GSG's 14 April 2021 Form 8-K (pp 7-8)
	GSG's 2020 Third Quarter Form 10-Q (p. 1)
	Exhibit 99.1 to GSG's 14 October 2020 Form 8-K (pp. 14-15)
	GSG's 2020 Second Quarter Form 10-Q (p. 1)
Cash flow statement (*Annex 6, Section 11, Item 11.2.1 of the PR Regulation*)	GSG's 2020 Third Quarter Form 10-Q (p. 4)

	GSG's 2020 Second Quarter Form 10-Q (p. 4)
Accounting policies and explanatory notes (*Annex 6, Section 11, Item 11.2.1 of the PR Regulation*)	GSG's 2020 Third Quarter Form 10-Q (pp. 5-98)
	GSG's 2020 Second Quarter Form 10-Q (pp. 5-95)
Legal and arbitration proceedings (*Annex 6, Section 11, Item 11.4.1 of the PR Regulation*)	GSG's 2020 Third Quarter Form 10-Q (pp. 86-95)
	GSG's 2020 Second Quarter Form 10-Q (pp. 86-94)
	GSG's 2020 Form 10-K (pp. 45, 185-193)
Additional information	
Share capital (*Annex 6, Section 12, Item 12.1 of the PR Regulation*)	GSG's 2020 Third Quarter Form 10-Q (pp. 3, 63-70)
	GSG's 2020 Second Quarter Form 10-Q (pp. 3, 70-72)
	GSG's 2020 Form 10-K (pp. 118, 184-186)

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 this Base Prospectus pursuant to Article 6(1) of the EU Prospectus Regulation and/or UK Prospectus Regulation and is not otherwise required to be included under the relevant schedules of the PR Regulation.)".

3. Amendments to the section entitled "Share Linked Conditions"

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

(a) deleting the following definitions to the Share Linked Condition 7 (*Definitions*) (as amended by Prospectus Supplement No. 9 to the Original Base Prospectus dated 22 March 2021) on pages 397 to 406 of the Original Base Prospectus and replacing them with the following:

"" **Actual Dividend**" means, in respect of a Share, a Relevant Dividend (excluding any Extraordinary Dividends, unless the relevant Issue Terms provide that, for such Share, "Include Extraordinary Dividends" to be applicable, in which case, for such Share, the Actual Dividends and the corresponding Relevant Dividends shall include all Extraordinary Dividends) for such Share declared (being the "**Declared Dividend**" corresponding to such Actual Dividend) by the Share Issuer of the Share to any holder of record of a single Share on the relevant record date in respect of such Relevant Dividend, where the Ex-Dividend Date for such Relevant Dividend falls in the Dividend

Period for such Share, PROVIDED THAT:

if:

(i) if the amount actually paid or delivered by the Share Issuer of a Share to holders of record of the Share in respect of such Relevant Dividend is not equal to the corresponding Declared Dividend; and/or

(ii) the Share Issuer of the Share declares an intention to adjust any Relevant Dividend to one or more holders of record of the Share,

(and, in the case of (i) and (ii), the amount of such difference being the "**Dividend Difference Amount**" and the date of such declaration being the "**Dividend Difference Declaration Date**" for such Relevant Dividend), then:

(a) for the purposes of any potential payment date in respect of the Share Linked Securities scheduled to fall on or prior to the second Business Day after the Dividend Difference Declaration Date in respect of which whether payment should be made and/or the amount of payment is determined by reference in any way to an Adjusted Share Price calculated using such Actual Dividend as a parameter, the Actual Dividend used to determine such Adjusted Share Price shall be deemed to be such Relevant Dividend; and

(b) for the purposes of any potential payment date in respect of the Share Linked Securities scheduled to fall more than two Business Days after the Dividend Difference Declaration Date in respect of which whether payment should be made and/or the amount of payment is determined by reference in any way to a Adjusted Share Price calculated using such Actual Dividend as a parameter, the Actual Dividend used to determine such Adjust Share Price may be adjusted by an amount equal to the Dividend Difference Amount, as determined by the Calculation Agent acting in good faith and in a commercially reasonable manner.";

""**CSP(t-1)**" means, in respect of a Share and a relevant date, the Closing Share Price of such Share in respect of the Dividend Observation Date immediately preceding such date, or, if there is no Dividend Observation Date preceding such date, the Closing Share Price in respect of the Dividend Period Start Date";

(b) deleting the second definition of "Gross Cash Dividend" in the Share Linked Condition 7 (*Definitions*) (as amended by Prospectus Supplement No. 9 to the Original Base Prospectus dated 22 March 2021**)** on pages 397 to 406 of the Original Base Prospectus and replacing it with the following:

""**Gross Cash Equivalent Dividend**" means, in respect of a Share, an amount per Share being the cash value of any stock dividend (whether or not such stock dividend comprises of shares of the Share Issuer of such Share) declared by the Share Issuer of the Share. Where the Share Issuer of the Share does not declare a cash value of such stock dividend, an amount determined by the Calculation Agent on the basis of the closing price of the share comprising such stock dividend as published by the relevant primary exchange on the Ex-Dividend Date for such stock dividend (being "Stock Dividend Closing Price" for such Gross Cash Equivalent Dividend). If the Stock Dividend Closing Price for a Gross Cash Equivalent Dividend is not available for any reason, the value of such Gross Cash Equivalent Dividend shall be determined by the Calculation Agent. Further, if such Gross Cash Equivalent Dividend is denominated in a currency other than the Share Currency for such Share, then the Calculation Agent shall convert the value of such Gross Cash Equivalent Dividend into the Share Currency on the relevant Ex-Dividend Date for such Gross Cash Equivalent Dividend.".

4. Amendments to the section entitled "Index Linked Conditions"

The information in the section entitled "*Index Linked Conditions*" is amended and supplemented by deleting the definition of "Strategy Component" on page 450 of the Original Base Prospectus in its entirety and replacing it with the following:

""**Strategy Component**" means, in respect of a Proprietary Index, a "Strategy Component", an "Index Component" or a "Component", as the case may be, as defined in the relevant Index Rules.".

5. Amendments to the index description in respect of the Goldman Sachs Single Stocks Static Basket Indices

The index description in the section entitled "*Goldman Sachs Single Stocks Static Basket Indices*" on pages 968 to 971 is deleted in its entirety and replaced with the index description in Annex A below.

6. Amendments to the section entitled "Goldman Sachs International"

The information in the section entitled "*Goldman Sachs International*" is amended and supplemented by deleting the sub-section entitled "*Selected Financial Information*" on pages 1003 to 1004 of the Original Base Prospectus and replacing it with the following:

"The selected financial information set out below has been extracted from GSI's 2020 Financial Statements and GSI's 2019 Financial Statements, which have been audited by PricewaterhouseCoopers LLP and on which PricewaterhouseCoopers LLP issued an unqualified audit report.

GSI's 2020 Financial Statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**"). GSI's 2019 Financial Statements have been prepared under United Kingdom Generally Accepted Accounting Practices ("**U.K. GAAP**") in accordance with FRS 101 Reduced Disclosure Framework ("**FRS 101**"). As such, GSI has prepared IFRS transition disclosures required by IFRS 1 (First-time adoption of International Financial Reporting Standards). 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:

<table>
<tr><td></td><td colspan="3">As at and for the period ended[1]</td></tr>
<tr><td rowspan="2">(in USD millions)</td><td rowspan="2">31 December 2020</td><td colspan="2">30 November 2019</td></tr>
<tr><td>IFRS</td><td>U.K. GAAP</td></tr>
<tr><td>Operating Profit</td><td>N/A</td><td>N/A</td><td>2,656</td></tr>
<tr><td>Profit before taxation</td><td>3,524</td><td>2,434</td><td>2,426</td></tr>
<tr><td>Profit for the financial period</td><td>2,755</td><td>2,008</td><td>1,802</td></tr>
<tr><td></td><td colspan="3">As at</td></tr>
<tr><td rowspan="2">(in USD millions)</td><td rowspan="2">31 December 2020</td><td colspan="2">30 November 2019</td></tr>
<tr><td>IFRS</td><td>U.K. GAAP</td></tr>
<tr><td>Fixed Assets</td><td>507[2]</td><td>461[2]</td><td>409</td></tr>
<tr><td>Current Assets</td><td>1,263,014</td><td>1,035,557</td><td>1,040,845</td></tr>
<tr><td>Total Shareholders' Equity</td><td>36,578</td><td>34,254</td><td>34,248</td></tr>
</table>

[1] During the period ended 31 December 2020, GSI changed its accounting reference end date from November 30 to December 31 to conform to the period used by GSI for U.S. tax reporting purposes. All references to December 2020 refer to the thirteen months period ended, or the date, as the context requires, 31 December 2020.
2 Fixed Assets are computed by adding (i) Property, leasehold improvements and equipment, (ii) Intangible assets and (iii) Right-of-use assets in Note 15. Other Assets of GSI's 2020 Financial Statements.

7. Amendments to the section entitled "General Information"

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

(a) deleting sub-paragraph (a) under the sub-section 2 "Financial Statements" on page 1114 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 31 December 2020, 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 1114 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 31 December 2020. There has been no material adverse change in the prospects of GSI since 31 December 2020.";

(c) deleting sub-section 4 "Litigation" on page 1115 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 52, 202 to 209) of GSG's 2020 Form 10-K, (ii) "Legal Proceedings" of Note 27 to the Financial Statements (pages 86 to 95) of GSG's 2020 Second Quarter Form 10-Q, (iii) "Legal Proceedings" of Note 27 to the Financial Statements (pages 90 to 92) of GSI's 2020 Annual Report and (iv) "Legal Proceedings" of Note 27 to the Financial Statements (pages 90 to 92) of GSG's 2020 Third Quarter Form 10-Q, 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 entitled "*Availability of Documents*" on pages 1115 to 1116 of the Original Base Prospectus and replacing it with the following:

"5. **Availability of Documents**

Copies of the following documents will be made available for at least 10 years and 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 and (in the case of (i), on https://www.goldman-sachs.ch/ch/media/ch/dokumente/sonstiges/19-10-04-GS FCI_Constitutional_Documents.pdf and in the case of (ii) to (iv),(xviii),(xix) and (xx) on the website of the Issuer at https://www.goldmansachs.com/investor-relations/:

(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 2020 Third Quarter Financial Report;

(vi) GSI's 2020 Second Quarter Financial Report;

(vii) GSI's 2020 First Quarter Financial Report;

(viii) GSI's Regulatory Ratios, 31 December 2019;

(ix) GSI's 2020 Annual Report;

(x) GSI's 2019 Annual Report;

(xi) GSI's 2018 Annual Report;

(xii) GSW's 2018 Financial Statements;

(xiii) GSW's 2019 Financial Statements;

(xiv) GSW's 2020 Interim Financial Statements;

(xv) GSFCI's 2019 Financial Statements;

(xvi) GSFCI's 2018 Financial Statements;

(xvii) GSFCI's 2020 Interim Financial Statements;

(xviii) GSG's 19 February 2021 Form 10-K;

(xix) GSG's 14 April 2021 Form 8-K;

(xx) GSG's 19 January 2021 Form 8-K;

(xxi) GSG's 22 October 2020 Form 8-K;

(xxii) GSG's 14 October 2020 Form 8-K;

(xxiii) GSG's 24 July 2020 Form 8-K;

(xxiv) GSG's 15 July 2020 Form 8-K;

(xxv) GSG's 2020 Third Quarter Form 10-Q;

(xxvi) GSG's 2020 Second Quarter Form 10-Q;

(xxvii) GSG's 2020 First Quarter Form 10-Q;

(xxviii) GSG's 2021 Proxy Statement;

(xxix) GSG's 2020 Proxy Statement;

(xxx) the GSG Guaranty;

(xxxi) the GSI Guarantee;

(xxxii) the GSI (Cayman) Guarantee;

(xxxiii) the Programme Agency Agreement;

(xxxiv) the Deed of Covenant and the Cayman Deed of Covenant;

(xxxv) the Issue 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;

(xxxvi) a copy of the Base Prospectus;

(xxxvii) a copy of any supplement to the Base Prospectus and Issue Terms; and

(xxxviii) 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.

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 21 April 2021

ANNEX A

GOLDMAN SACHS SINGLE STOCKS STATIC BASKET INDICES

INDEX DESCRIPTION

Dated: 21 April 2021

The information set out in this Index Description is only an overview of the Goldman Sachs Single Stocks Static Basket Indices and must be read in conjunction with the Index Rules (as defined below). This Index Description is intended to highlight essential characteristics of the Goldman Sachs Single Stocks Static Basket Indices and does not purport to be complete. It is summarised from, and is qualified in its entirety by, the Index Rules.

1. Introduction

The Goldman Sachs Single Stocks Static Basket Indices (each, an "**Index**" and together, the "**Indices**") are a group of notional rules-based proprietary indices which Goldman Sachs International (or its successor(s)) (the "**Index Sponsor**") may create from time to time. Goldman Sachs International (or its successor(s)) will also act as the index calculation agent in calculating and publishing an Index (the "**Index Calculation Agent**"). References in this Index Description to "the Index" shall mean the relevant Index.

The complete rules and methodology applicable to the Index (the "**Index Rules**") and notices in respect of the Index will be made available on the website specified in the Index Supplement. The Index Rules comprise the following documentation elements:

(i) the Goldman Sachs General Strategy Terms dated 23 November 2020 (or any successor version);

(ii) the Goldman Sachs Single Stock Indices Base Methodology with FX Hedging (or any successor version); and

(iii) the relevant "index supplement" document describing the parameters which apply to a particular Index (or any successor version) (the "**Index Supplement**").

Below, we describe:

- the objective and overview of the Index (section 2);
- how the exposure of the Index to the Component Stocks is calculated (section 3);
- how the Index Value is calculated (section 4);
- the effect of the deduction of Transaction Costs and the Index Deduction Rate on the Index Value (section 5);
- the consequences of certain corporate action determinations and adjustments, Disruption Events, corrections to the Index and changes to the Index methodology (section 6); and
- an overview of conflicts of interest (section 7).

2. Objective and Overview of the Index

The Index seeks to provide synthetic exposure to a basket (the "**Basket**") of equity stocks (each, a "**Component Stock**") which are selected from a broad universe of equity stocks in multiple jurisdictions and/or traded on different exchanges. The Component Stocks included in the Basket and the fixed weight assigned to each Component Stock (the "**Weight**") will be specified in the Index Supplement. As the Index is "synthetic" or "notional", it represents an investment in each Component Stock without physically owning them, and there is no actual portfolio of Component Stocks to which any person is entitled or in which any person has any ownership interest.

The Index is denominated in the currency specified in the Index Supplement (the "**Index Currency**"). A Component Stock may or may not be denominated in the Index Currency.

The Index will have a long exposure to each Component Stock in the Basket. The Basket will be rebalanced on a regular basis on each day specified in the Index Supplement (each, a "**Rebalancing Day**" and such rebalancing, a "**Basket Rebalancing**"). The quantity of exposure (the "**Number of Shares**") of the Index to each Component Stock will be determined on a Rebalancing Day and will reflect its target Weight as well as any adjustments made by the Index Calculation Agent to reflect corporate actions occurring in respect of such Component Stock, as more particularly described in section 3 (*Calculation of the Number of Shares of each Component Stock*) below. Depending the performance of each Component Stock relative to the other Component Stocks in the Basket since the immediately preceding Rebalancing Day, the actual exposure the Index has to each Component Stock during the period between each rebalancing of the Basket may vary from their assigned Weights.

The Index may be calculated on a "Price Return", "Net Total Return" or "Gross Total Return" basis, as specified in the Index Supplement. If the Index is calculated on a "Net Total Return" or "Gross Total Return" basis, then any dividend amounts paid in respect of a Component Stock will be taken into account in calculating the Index. If the Index is calculated on a "Net Total Return" basis, then a notional dividend withholding tax will be deducted from any dividend amounts paid in respect of a Component Stock. The notional dividend withholding tax rate applied to dividend amounts may vary depending on the jurisdiction of incorporation of the issuer of the relevant Component Stock and will be determined by the Index Calculation Agent.

If "FX Hedge" is specified to be applicable in the Index Supplement, then the value of the Index will be adjusted to hedge the currency exposures of the Index. Such adjustment shall reduce but not eliminate foreign exchange risk.

The calculation of the Index will include deductions that are intended to synthetically reflect the transaction costs that a hypothetical investor would incur if it entered into and maintained direct investment positions providing the same exposure to the Component Stocks included in the Basket. Such transaction costs are linked to the magnitude and frequency of changes to the quantity of exposure the Index has to each Component Stock. The value of the Index may also be reduced by the deduction of a fixed pre-determined rate (an "**Index Deduction Rate**") if so specified in the Index Supplement. The effect of these deductions could be to benefit the Index Sponsor and/or its affiliates. The actual costs of hedging the exposure to the Index may be lower or higher than these deductions and, if they were lower, this may result in investors being in a worse position than if they were to maintain direct investment positions in the Component Stocks. The value of the Index will increase if the Component Stocks included in the Basket perform positively overall, though any positive performance will be reduced by the abovementioned deductions. See further section 5 (*Effect of the Deduction of Transaction Costs and Index Deduction Rate*) below for further details.

The Index will be reviewed periodically in accordance with the Index Sponsor's internal policies.

The Index, including the methodology and underlying assumptions, may not be successful in achieving its objective or in producing positive returns, and may not outperform any alternative investment strategy.

3. Calculation of the Number of Shares of each Component Stock

The Index Calculation Agent will calculate the value of the Index (the "**Index Value**") on each Index Business Day starting from the Index Inception Date. Each of "**Index Business Day**" and "**Index Inception Date**" shall be as specified in the Index Supplement.

In order to calculate the Index Value, the Index Calculation Agent will first determine the Number of Shares of each Component Stock in the Basket on a Rebalancing Day as an amount equal to the *quotient* of (a) the *product* of (i) the Basket Closing Value on the Observation Day corresponding to such Rebalancing Day, *multiplied* by (ii) the Weight of such Component Stock, *divided* by (b) the official closing price of such Component Stock published on the primary exchange on which it is traded ("**Official Closing Price**") in respect of such Observation Day (or, if the Official Closing Price of such Component Stock is denominated in a currency other than the Index Currency, as converted into the

Index Currency using the FX Rate Fixing). Each of "**Observation Day**" and "**FX Rate Fixing**" (if applicable) shall be as specified in the Index Supplement.

The Number of Shares in respect of a Component Stock will reflect adjustments made by the Index Calculation Agent for any dividends or corporate actions occurring in respect of such Component Stock, and will become effective as of the opening of the Index Business Day immediately following the relevant Rebalancing Day. In respect of each Index Business Day thereafter until, and including, the next Rebalancing Day, the Number of Shares in respect of a Component Stock will be equal to the Number of Shares of such Component Stock for the immediately preceding Index Business Day, unless otherwise adjusted by the Index Calculation Agent for any dividends or corporate actions occurring in respect of such Component Stock. Depending on the performance of each Component Stock relative to the other Component Stocks in the Basket since the immediately preceding Rebalancing Day, the actual exposure the Index has to each Component Stock during the period between each rebalancing of the Basket may vary from their assigned Weights.

4. Calculation of the Index Value

The Index Value on the Index Inception Date will be as specified in the Index Supplement. On each Index Business Day thereafter, the Index Value will be either (a) if "FX Hedge" is not specified as applicable in the Index Supplement, a currency-unhedged value of the Index (the "**Index Unhedged Value**"), or (b) if "FX Hedge" is specified as applicable in the Index Supplement, a currency-hedged value of the Index (the "**Index Hedged Value**").

The Index Value will be published on each Index Business Day by the Index Calculation Agent on the website and under the ticker specified in the Index Supplement, subject to the right of the Index Sponsor and/or Index Calculation Agent to suspend or discontinue publication of the Index Value at any time and for any reason, or to publish the Index Value on such other information sources as the Index Sponsor may select from time to time. The Index Value will be rounded to the number of decimal places specified in the Index Supplement.

(a) Calculation of the Index Unhedged Value

In respect of an Index Business Day ("**Index Business Day (t)**") falling after the Index Inception Date, the Index Unhedged Value seeks to reflect the value of the Basket of Component Stocks less Transaction Costs and the Index Deduction Rate, and is determined in accordance with the following formula:

$$I_t = I_{t-1} \times \left[\frac{BCV_t + BDiv_t}{BOV_t} \times (1 - Cost_t) \times \left(1 - SD\ \times DayCountFraction(t-1, t)\right)\right]$$

Where:

"$\boldsymbol{BCV_t}$" means the Basket Closing Value on Index Business Day (t);

"$\boldsymbol{BDiv_t}$" means the Basket Dividend on Index Business Day (t);

"$\boldsymbol{BOV_t}$" means the Basket Opening Value on Index Business Day (t);

"$\boldsymbol{Cost_t}$" means the Basket Rebalancing Cost on Index Business Day (t);

"***DayCountFraction*****(t – 1, t)**" means the day count fraction in respect of the period commencing on, and including, the Index Business Day immediately preceding Index Business Day (t) and ending on, but excluding, Index Business Day (t), as specified in the Index Supplement;

"$\boldsymbol{I_t}$" means the Index Unhedged Value on Index Business Day (t);

"$\boldsymbol{I_{t-1}}$" means the Index Unhedged Value on the Index Business Day immediately preceding Index Business Day (t); and

"***SD***" means the Index Deduction Rate (or, if none is specified in the Index Supplement, zero).

If "Index Value Floor" is specified to be applicable in the Index Supplement, and the Index Unhedged Value in respect of any Index Business Day is zero or negative, the Index Unhedged Value for such Index

Business Day and all Index Business Days thereafter will be deemed to be equal to zero. If "Index Value Floor" is specified to be not applicable in the Index Supplement, the Index Unhedged Value may be negative.

The "**Basket Closing Value**" on an Index Business Day is equal to the aggregate value of the shares of each Component Stock included in the Basket at the close of such Index Business Day. The value of the shares of a Component Stock at the close of an Index Business Day is calculated as the *product* of (i) the Number of Shares of such Component Stock in respect of such Index Business Day, *multiplied* by (ii) its Official Closing Price on such Index Business Day (or, if the Official Closing Price of such Component Stock is denominated in a currency other than the Index Currency, as converted into the Index Currency using the FX Rate Fixing).

The "**Basket Opening Value**" on an Index Business Day is equal to the aggregate value of the shares of each Component Stock included in the Basket at the open of such Index Business Day. The value of the shares of a Component Stock at the open of an Index Business Day is calculated as the *product* of (i) the Number of Shares of such Component Stock in respect of such Index Business Day, *multiplied* by (ii) its Official Closing Price on the immediately preceding Index Business Day (or, if the Official Closing Price of such Component Stock is denominated in a currency other than the Index Currency, as converted into the Index Currency using the FX Rate Fixing), and further *multiplied* by (iii) a price adjustment factor to account for any corporate actions occurring in respect of such Component Stock.

The "**Basket Dividend**" on an Index Business Day is equal to: (i) if the Index is calculated on a "Price Return" basis, zero, (ii) if the Index is calculated on a "Gross Total Return" basis or a "Net Total Return" basis, the aggregate of the dividend amounts of each Component Stock included in the Basket, provided that (A) if the Official Closing Price of the relevant Component Stock is denominated in a currency other than the Index Currency, the dividend amount shall be converted into the Index Currency using the FX Rate Fixing, and (B) if the Index is calculated on a "Net Total Return" basis, the Basket Dividend will reflect a deduction in respect of notional dividend withholding tax in respect of each Component Stock, which is intended to reflect the withholding tax that is levied or may be levied by the country of incorporation or residence of the issuer of each Component Stock. This means that if the Index Sponsor (or any of its affiliates) has hedged its exposure to the Component Stocks, it will benefit if the effective rate of withholding tax that it incurs in carrying out its hedging activities is less than the rate of the notional dividend withholding tax applied in calculating the Basket Dividend. Any such benefit will not be passed on to investors in any Securities linked to the Index.

The "**Basket Rebalancing Cost**" on an Index Business Day that is a Rebalancing Day is equal to the sum of the cost that is notionally incurred in entering or unwinding positions in each Component Stock as a result of a Basket Rebalancing. Such cost is calculated as the *product* of (i) the transaction cost rate specified in the Index Supplement ("**Transaction Cost Rate**") applicable to the relevant Component Stock, *multiplied* by (ii) the change in the actual exposure of the Index to such Component Stock. The Basket Rebalancing Cost on an Index Business Day that is not a Rebalancing Day will be zero. See section 5 (*Effect of the Deduction of Transaction Costs and Index Deduction Rate*) below for more details.

(b) Calculation of the Index Hedged Value

In respect of an Index Business Day (t) falling after the Index Inception Date, the Index Hedged Value seeks to reflect the Index Unhedged Value as adjusted to hedge the currency exposures of the Index, and is determined in accordance with the following formula:

$$HI_t = HI_{L1} \times (\frac{UH_t}{UH_{L1}} + FXHedgeImpact_t)$$

Where:

"$\boldsymbol{FXHedgeImpact_t}$" means the FX Hedge Impact on Index Business Day (t);

"$\boldsymbol{HI_t}$" means the Index Hedged Value on Index Business Day (t);

"$\boldsymbol{HI_{L1}}$" means the Index Hedged Value in respect of the last Index Business Day of the month immediately preceding the calendar month in which Index Business Day (t) falls;

"$\boldsymbol{UH_t}$" means the Index Unhedged Value on Index Business Day (t); and

"$\boldsymbol{UH_{L1}}$" means the Index Unhedged Value in respect of the last Index Business Day of the month immediately preceding the calendar month in which Index Business Day (t) falls.

The "**FX Hedge Impact**" on an Index Business Day is equal to the aggregate impact of the hedging positions in interpolated forward exchange rates that are notionally entered into by the Index to hedge against currency fluctuations.

5. Effect of the Deduction of Transaction Costs and Index Deduction Rate

The Index Value will be reduced by the deduction of certain costs. There are two types of costs that are deducted from the Index:

(a) transaction costs, which are intended to synthetically reflect the transaction costs (including, but not limited to, any applicable stamp duty payments, financial transaction taxes, brokerage costs, and/or other fees and expenses) ("**Transaction Costs**") that would be incurred by a hypothetical investor if it were to enter into actual transactions representing the notional rebalancing of the Basket on a Rebalancing Day. Transaction Costs are only deducted on a Rebalancing Day. The Transaction Costs associated with each Component Stock is calculated by reference to the Transaction Cost Rate applicable to such Component Stock. The Transaction Cost Rate in respect of each Component Stock will be as specified in the Index Supplement; and

(b) an Index Deduction Rate, which is intended to reduce the pricing of certain transactions linked to the Index. The Index Deduction Rate will be specified as a fixed percentage in the Index Supplement (or, if none is specified in the Index Supplement, zero).

Such deductions will act as a drag on the performance of the Index. For the avoidance of doubt, the published Index Value is net of the above costs.

As the notional Transaction Costs are calculated by reference to pre-determined Transaction Cost Rates, they do not necessarily reflect the actual or realised transaction costs that would be incurred by a hypothetical investor in the relevant Component Stocks, which could be greater or less than the Transaction Costs. The Index Sponsor and/or any affiliate in its capacity as issuer of or counterparty to Securities linked to the Index (a "**Hedging Party**") that has hedged its exposure to the Component Stocks will benefit if the actual or realised transaction costs that it incurs in carrying out its hedging activities are less than the Transaction Costs. Any such benefit will not be passed on to investors in Securities linked to the Index. Further, if such actual or realised transaction costs are less than the Transaction Costs, investors may be in a worse position than if they maintained direct investment positions in the Component Stocks.

6. Corporate Action Determinations and Adjustments, Disruption Events, Corrections and Changes in Index Methodology

(a) Corporate Action Determinations and Adjustments

For corporate action determinations and/or adjustments, the Index Calculation Agent will make such determinations and/or adjustments by reference to the "Equity Basket Calculation Methodology" and "Withholding Tax Rates" published at https://www.solactive.com/documents/ (or any successor website) (the "**Index Calculation Agent Methodology**").

Following the determination by the Index Calculation Agent that:

(i) a Component Stock has commenced trading ex-dividend in respect of an ordinary cash dividend;

(ii) an extraordinary event ("**Extraordinary Event**") has occurred in respect of a Component Stock, including a merger, a takeover or tender offer, the nationalisation of the shares or assets of the issuer of a Component Stock, a delisting of a Component Stock on an exchange, or the insolvency of the issuer of a Component Stock; or

(iii) any event having a diluting or concentrative effect on the theoretical value of a Component Stock or following any adjustment to the settlement terms of listed options or futures contracts on such Component Stock traded on an options or futures exchange,

the Index Calculation Agent will adjust the Index in accordance with the Index Calculation Agent Methodology.

If the Index Sponsor determines that it and/or its affiliates would be unable to, or would incur additional costs to, replicate an adjustment in accordance with the Index Calculation Agent Methodology, the Index Sponsor may instruct the Index Calculation Agent to take alternative action to allow the Index Sponsor and/or its affiliates to replicate the relevant adjustment, with the goal of preserving the original economic objective of the Index.

The Index Calculation Agent may change the Index Calculation Agent Methodology from time to time (including creating a new methodology to determine corporate actions and adjustments).

(b) Disruption Events

Certain events may occur in respect of the Index, a Component Stock or input data used for determinations and/or calculations relating to the Index ("**Input Data**", together with the Component Stocks, "**Relevant Underlyings**"), which affect the performance by the Index Sponsor or Index Calculation Agent of its obligations in respect of the Index or related hedging arrangements (each, a "**Disruption Event**"), including the following:

(i) the performance by the Index Sponsor or Index Calculation Agent of its obligations in respect of the Index becomes unlawful, impracticable or would result in materially increased costs to it, as a result of a change in law;

(ii) a Hedging Party is unable to enter or unwind hedging arrangements in respect of the Index or a Relevant Underlying or incurs increased costs in doing so;

(iii) any event or circumstance (including a trading disruption) which (A) affects the ability of market participants to enter into transactions in respect of a Relevant Underlying in a notional size required for transactions relating to the Index, or (B) impairs the liquidity or affects the value of such Relevant Underlying;

(iv) the occurrence of a "force majeure" event such as a systems failure, disaster, act of god, armed conflict, terrorism, etc. that is likely to have a materially impact a Relevant Underlying or the ability to perform obligations in respect of the Index;

(v) the official price or other measure of a Relevant Underlying is not available on any day on which it is scheduled to be published or provided;

(vi) (A) the occurrence of an unscheduled non-business day in respect of a Relevant Underlying or its trading venue, where no announcement thereof was made within a reasonable amount of time prior to such day, (B) the announcement by a trading venue or provider of a Relevant Underlying that a day that was previously not a business day in respect of such trading venue or Relevant Underlying shall be considered a business day, where no announcement thereof was made within a reasonable amount of time prior to such day, or (C) the relevant trading venue is not open for trading during its regular trading session or closes prior to its scheduled closing time;

(vii) the value of the Index and/or a Relevant Underlying is manifestly incorrect;

(viii) the Index Sponsor ceases to have the relevant data licence in respect of a Relevant Underlying;

(ix) any authorisation or similar requirement in respect of the Index, a Relevant Underlying or the Index Sponsor has not been, or will not be, obtained or has been, or will be, refused with the effect that any entity is not permitted under applicable law to use the Index and/or Relevant Underlying;

(x) a material change in national or international financial, political, legal or economic conditions likely to prejudice the calculation and publication of the Index Value; or

(xi) (A) an EU member state discontinues or suspends its membership of the EU, or rejects any obligation arising from its membership of the EU under the relevant treaties, or (B) the euro ceases to be the lawful currency of any EU member state.

In such circumstances, the Index Sponsor may take action to preserve the intended commercial purpose of the Index, including to: (i) make such determinations or adjustments to the Index to account for such Disruption Event, (ii) postpone any Basket Rebalancing, (iii) determine that the value of a Relevant Underlying for the period during which a Disruption Event is continuing shall be the value of such Relevant Underlying immediately prior to the occurrence of the Disruption Event, (iv) suspend or terminate the publication of the Index Value, (v) publish an indicative Index Value, and/or (vi) remove and/or replace any affected Relevant Underlying.

Certain events may occur in respect of a Component Stock which affect the performance by the Index Sponsor or Index Calculation Agent of its obligations in respect of the Index or related hedging arrangements (each, a "**Disruption Event**" for a Component Stock only), including the following:

(i) a prohibition or restriction or other adverse impact on short-selling a Component Stock, or on obtaining or offering synthetic exposure to a Component Stock, as a result of a change in law;

(ii) a limitation or suspension on trading in a Component Stock imposed by the relevant exchange; or

(iii) the adoption of or change to sanctions or restrictions which adversely impacts obtaining or offering synthetic exposure to a Component Stock.

In such circumstances, the Index Sponsor may take action to preserve the intended commercial purpose of the Index, including to: (i) exclude temporarily or permanently the affected Component Stock from the Index, and/or (ii) make such other adjustments to the terms of the Index to account for the Disruption Event.

Certain events may occur in respect of Input Data which affect the performance by the Index Sponsor or Index Calculation Agent of its obligations in respect of the Index (each, a "**Disruption Event**" for Input Data only), including the following:

(i) a party responsible for collecting, calculating, distributing or publishing Input Data (the "**Input Data Provider**") has ceased or will cease to publish Input Data;

(ii) there is a material change in the formula or method for calculating, or the content or frequency of publication of, Input Data; or

(iii) the Input Data Provider fails to calculate, publish or deliver Input Data or delivers incomplete Input Data.

In such circumstances, the Index Sponsor may take certain actions, including to: (i) use Input Data last published by the Input Data Provider, (ii) remove and/or replace any affected Relevant Underlying either permanently or temporarily, (iii) use information or data from an alternative data source, (iv) make adjustments to the Index as it determines necessary to account for the Disruption Event, and/or (iv) terminate the publication of the Index Value.

Certain events may occur in respect of a currency exchange rate which affect the performance by the Index Sponsor or Index Calculation Agent of its obligations in respect of the Index (each, a "**Disruption Event**" for a currency exchange rate only), including the following:

(i) a suspension of or limitation on trading on the relevant interbank market of a relevant currency exchange rate;

(ii) a relevant currency exchange rate splits into multiple currency exchange rates;

(iii) it is or becomes impossible to deliver the Index Currency (A) from accounts inside a relevant jurisdiction to accounts outside such jurisdiction, (B) between accounts inside such jurisdiction, or (C) to a party that is not resident in such jurisdiction;

(iv) an event of default or other similar event in respect of any security or indebtedness for borrowed money of, or guaranteed by, a relevant governmental authority;

(v) it is or becomes impossible or not reasonably practicable for the Index Sponsor or its affiliates to obtain a relevant currency exchange rate from its typical source;

(vi) any expropriation, confiscation, requisition, nationalisation or other action by a relevant governmental authority occurs which deprives the Index Sponsor or its affiliates of its assets in any relevant jurisdiction; or

(vii) a relevant currency exchange rate and/or Index Currency ceases to exist and is replaced by a new currency.

In such circumstances, the Index Sponsor may take action to preserve the intended commercial purpose of the Index, including to: (i) make such determinations or adjustments to the Index to account for such Disruption Event, (ii) postpone any Basket Rebalancing, (iii) determine that the value of a currency exchange rate for the period during which a Disruption Event is continuing shall be the value of such currency exchange rate immediately prior to the occurrence of the Disruption Event, (iv) suspend or terminate the publication of the Index Value, (v) publish an indicative Index Value, and/or (vi) remove and/or replace any affected currency exchange rate.

(c) Corrections

In the event that the value of any Component Stock or currency exchange rate which is utilised for any calculation or determination in respect of the Index is subsequently corrected, the Index Calculation Agent may use such corrected value or rate for the purpose of such calculation or determination and may adjust prior calculations or determinations. In making any such corrections or adjustments, the Index Calculation Agent will act in accordance with its error policy, a summary of which is available from the Index Calculation Agent upon request.

(d) Changes in Index Methodology

The Index Sponsor reserves the right to make changes to the methodology of the Index, including (i) to correct, cure or supplement any error, ambiguity, or contradictory or defective provision in the Index Rules, (ii) to change the frequency of calculation of the Index Value, (iii) to make modifications to the Index in order to continue calculating the Index Value if market, legal, regulatory, judicial, financial, fiscal or other circumstances arise which were not reasonably foreseeable or deliberately caused by the Index Sponsor and which would otherwise prevent the Index Value from being calculated, (iv) to preserve the commercial purpose of the Index where such changes are of a formal, minor or technical nature, or to increase the transparency of the Index Rules, and/or (v) to preserve the Index Sponsor's or its affiliates' ability to hedge the Index, Component Stocks and/or Input Data and maintain such Index as tradeable and replicable. The Index Sponsor will ensure that any such modifications will result in a methodology that is consistent with the commercial purpose of the Index.

Upon changing the methodology of the Index, the Index Sponsor will post details of such change on the website specified in the Index Supplement.

7. Overview of Conflicts of Interest

Goldman Sachs has multiple roles in connection with the Index, which include (a) calculating and publishing the Index Value and making certain determinations, and (b) engaging in a range of activities in its business as a full service financial services group which could affect the value of the Index or a Component Stock, which may give rise to potential conflicts of interest. In such capacities, it has the power to make determinations that are final, conclusive and binding and that could materially affect the Index Value. It does not owe any person any fiduciary duties in respect of the Index and is not required to take the interests of any person into account.

INVESTORS IN ANY PRODUCTS LINKED TO THE INDEX MUST READ AND UNDERSTAND THE INDEX RULES SETTING OUT THE COMPLETE METHODOLOGY, ADJUSTMENTS, RISK FACTORS, DISCLAIMERS AND CONFLICTS OF INTEREST APPLICABLE TO THE INDEX, COPIES OF WHICH WILL BE MADE AVAILABLE ON THE WEBSITE SPECIFIED IN THE INDEX SUPPLEMENT. IN PARTICULAR, AN INVESTOR

MUST PAY PARTICULAR ATTENTION TO THE CONFLICTS OF INTEREST APPLICABLE TO THE INDEX SET OUT IN THE INDEX RULES.