

### GS Finance Corp. guaranteed by The Goldman Sachs Group, Inc. Euro Medium-Term Notes, Series B

#### TERMS OF SALE

Unless the context requires otherwise, references to the notes refer to Series B euro medium-term notes. The following terms may apply to the notes that GS Finance Corp. may sell from time to time. The specific terms of each note will be included in the final terms relating to that note.

- stated maturity of up to 40 years from the date of issue
- fixed or floating interest rate, zero coupon and / or issued with original issue discount
- amount of interest and/or amount payable at maturity may be determined by reference to one or more underlying rates, measures or instruments
- may be subject to redemption at the option of GS Finance Corp. or repayment at the option of the holder
- may not be amortized or subject to a sinking fund

- may be denominated in U.S. dollars or in other currencies, currency units or composite currencies and payable in the denominated or other currencies
- denominations of at least €100,000 or, if denominated in other currencies, denominations of at least the equivalent of €100,000
- settlement in immediately available funds

The notes will not be secured by any of our property or assets or property or assets of The Goldman Sachs Group, Inc. and will not be subordinated to any of our other debt obligations or those of The Goldman Sachs Group, Inc. The notes shall be fully and unconditionally guaranteed as described herein by The Goldman Sachs Group, Inc. GS Finance Corp. is a wholly owned subsidiary of The Goldman Sachs Group, Inc.

Any of the terms described above may be varied in the applicable final terms to the extent permissible.

GS Finance Corp. may offer and sell these notes to or through one or more underwriters, dealers and agents, including Goldman Sachs International, or directly to purchasers, on a continuous or delayed basis.

This base prospectus (the "Base Prospectus") has been approved by the United Kingdom Financial Conduct Authority (the "FCA") which is the competent authority under Regulation (EU) 2017/1129 as it forms part of domestic law in the UK by virtue of the European Union (Withdrawal) Act 2018 (the "EUWA") (the "UK Prospectus Regulation"). The FCA only approves this Base Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the UK Prospectus Regulation. Such approval should not be considered as an endorsement of the Issuer or the Guarantor or the quality of the securities that are the subject of this Base Prospectus. Investors should make their own assessment as to the suitability of investing in the notes. Application has been made to the London Stock Exchange for notes issued under the Series B euro medium-term notes program to be listed on the Official List and admitted to trading on the Main Market of the London Stock Exchange plc (the "London Stock Exchange"). GS Finance Corp. is under no obligation to maintain the listing of any notes that are listed. See "Listing and General Information" below.

This Base Prospectus constitutes a base prospectus for the purposes of Article 8(1) of the UK Prospectus Regulation. The Base Prospectus should be read together with any supplements thereto, all documents incorporated by reference therein and the applicable final terms.

Subject to certain exceptions, the notes may not be offered, sold or delivered, directly or indirectly, in the United States of America or to U.S. persons. See "Plan of Distribution". The notes and guarantees have not been and will not be registered under the United States Securities Act of 1933, as amended, or under the securities or blue sky laws of any state. Neither the U.S. Securities and Exchange Commission nor any other regulatory body has approved or disapproved of the notes or passed upon the accuracy or inaccuracy of this Base Prospectus is not for use in, and may not be delivered to or inside, the United States or provided to a U.S. person.

The notes we may issue are not bank deposits and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency, nor are they obligations of, or guaranteed by, a bank.

GS Finance Corp. may use this Base Prospectus in the initial sale of any note. In addition, Goldman Sachs International or any other affiliate of GS Finance Corp. may use this Base Prospectus in a market-making transaction in any note after its initial sale. Unless GS Finance Corp. or its agent informs the purchaser otherwise in the confirmation of sale, this Base Prospectus is being used in a market-making transaction.

If the notes are stated in the applicable final terms to be issued under the new safekeeping structure ("NSS"), then we will deliver these notes to a common safekeeper for Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking, *société anonyme* ("Clearstream, Luxembourg"). Global notes which are not issued under NSS will be deposited with a common depositary for Euroclear and Clearstream, Luxembourg.

See "Risk Factors" beginning on p. 12 for a discussion of certain risks that should be considered in connection with an investment in certain types of notes which may be offered hereby.

### **Goldman Sachs International**

Base Prospectus, dated September 24, 2021

Unless the context otherwise requires, references in this Base Prospectus to "GS Finance Corp.", "the Issuer", "we", "our" and "us" mean only GS Finance Corp. and do not include "The Goldman Sachs Group, Inc." and references to "The Goldman Sachs Group, Inc." or the "Guarantor" refer only to The Goldman Sachs Group, Inc. and not to its consolidated subsidiaries. References to "Goldman Sachs", "the Group" and the "Goldman Sachs Group" refer to The Goldman Sachs Group, Inc. together with its consolidated subsidiaries. Also, when we refer to "holders" we mean those who own notes registered in their own names, on the books that we or our agents maintain for this purpose; "holders" does not refer to those who own beneficial interests in notes registered in street name or in notes issued in global — *i.e.*, book-entry — form through Euroclear SA/NV, Clearstream Banking, *société anonyme*, or another depositary. Prospective owners of beneficial interests in the notes issued in global form should read the section entitled "General Note Conditions — Form, Exchange, Registration and Transfer" below.

We have not authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this Base Prospectus. Neither this Base Prospectus nor any final terms constitutes an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation in that jurisdiction. Neither the delivery of this Base Prospectus, any final terms nor any sale made pursuant to those documents, shall, under any circumstances, create any implication that there has been no change in the affairs of GS Finance Corp. or The Goldman Sachs Group, Inc. since the date of the document or that the information contained within the documents is correct as of any time subsequent to its date.

The London Stock Exchange's Main Market is a regulated market for the purposes of Regulation (EU) No. 600/2014 as it forms part of UK domestic law by virtue of the EUWA ("UK MiFIR)".

The credit ratings of The Goldman Sachs Group, Inc. referred to in the Base Prospectus have been issued by DBRS, Inc., Fitch, Inc., Moody's Investors Service and Standard & Poor's Ratings Services, each of which is established in the United States (together, the "US CRAs").

UK regulated investors are subject to Regulation (EU) No. 1060/2009, amended by Regulation (EU) No 513/2011, as it forms part of domestic law by virtue of the EUWA (as amended, the "UK CRA Regulation"). In general, UK regulated investors are required to use for UK regulatory purposes ratings issued by a credit rating agency established in the UK and registered under the UK CRA Regulation unless (1) the rating is endorsed by a UK registered credit rating agency; or (2) issued by a third country credit rating agency that is certified in accordance with the UK CRA Regulation, subject in each case, to (i) the relevant UK registration, certification or endorsement, as the case may be, not having been withdrawn or suspended, and (ii) transitional provisions that apply in certain circumstances. In the case of ratings issued by a credit rating agency not established in the UK, for a certain limited period of time, transitional relief accommodates the continued use for regulatory purposes in the UK, of ratings issued prior to 1 January 2021, provided that the relevant conditions are satisfied.

In general, European regulated investors are restricted from using a rating for regulatory purposes if such rating is not either (1) issued or validly endorsed by a credit rating agency established in the European Economic Area (an "EEA CRA") and registered with the European Securities and Markets Authority ("ESMA") under Regulation (EU) No. 1060/2009, amended by Regulation (EU) No 513/2011 (as amended, the "CRA Regulation") or (2) issued by a credit rating agency established outside the European Economic Area which is certified under the CRA Regulation.

The EU affiliates of DBRS, Inc., Fitch, Inc., Moody's Investors Service, Standard & Poor's Ratings Services are registered EEA CRAs on the official list, available at https://www.esma.europa.eu/supervision/credit-rating-agencies/risk. The ESMA has approved the endorsement by such EU affiliates of credit ratings issued by the corresponding US CRAs. Accordingly, credit ratings issued by the US CRAs may be used for regulatory purposes in the EU. The UK affiliates of DBRS, Inc., Fitch, Inc., Moody's Investors Service, Standard & Poor's Ratings

Services are registered under the UK CRA Regulation on the official list, available at https://www.fca.org.uk/markets/credit-rating-agencies/registered-certified-cras. In addition to the US CRAs mentioned, Rating and Investment Information, Inc. ("R&I") has issued a credit rating. This rating is incorporated in the Base Prospectus for information purposes only. R&I is incorporated in a third country but has not applied for the registration under the CRA Regulation.

#### **Responsibility Statement**

GS Finance Corp. accepts responsibility for the information contained in this Base Prospectus. To the best of the knowledge of GS Finance Corp., the information contained in this Base Prospectus is in accordance with the facts and the Base Prospectus makes no omission likely to affect its import. Where information contained in this Base Prospectus has been sourced from a third party, such information has been accurately reproduced and so far as GS Finance Corp. is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading.

The Goldman Sachs Group, Inc. accepts responsibility for the information contained in this Base Prospectus. To the best of the knowledge of The Goldman Sachs Group, Inc., the information contained in this Base Prospectus is in accordance with the facts and the Base Prospectus makes no omission likely to affect its import. Where information contained in this Base Prospectus has been sourced from a third party, such information has been accurately reproduced and so far as The Goldman Sachs Group, Inc. is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading.

Other than in relation to any documents which are incorporated by reference herein, no content of any website, cited or referred to in this Base Prospectus, shall be deemed to form part of this Base Prospectus and has not been scrutinised or approved by the FCA.

In relation to notes listed on the Official List and admitted to trading on the Main Market of the London Stock Exchange, this Base Prospectus is valid for a period of twelve months after its date of approval and will expire on September 25, 2022. GS Finance Corp. has undertaken, in connection with the listing of the notes, that if there shall occur any significant new factor, material mistake or inaccuracy relating to the information included in the Base Prospectus occurs, which is capable of affecting the assessment of the Notes to be issued under the Program or the issue of any notes,, GS Finance Corp. will prepare and make available a supplement to this Base Prospectus or a further Base Prospectus for any subsequent issue of notes to be listed on the Official List and admitted to trading on the Main Market of the London Stock Exchange. If at any time the Issuer and the Guarantor are required to prepare a supplemental prospectus pursuant to Section 87(G) of the FSMA, the Issuer and the Guarantor will prepare and make available an appropriate supplement to this Base Prospectus or a further prospectus which, in respect of any subsequent issue of Notes to be listed on the Official List and admitted to trading on the Main Market of the London Stock Exchange, shall constitute a supplemental prospectus as required by the FCA and Section 87(G) of the FSMA.

The obligation to supplement this Base Prospectus in the event of any significant new factor, material mistake or material inaccuracy relating to the information included in this Base Prospectus will not apply when this Base Prospectus is no longer valid.

In this section, the expression "necessary information" means, in relation to any tranche of notes, the information necessary to enable investors in such notes to make an informed assessment of the assets and liabilities, financial position, profits and losses and prospects of GS Finance Corp. and The Goldman Sachs Group, Inc., of the rights attaching to such notes, and the reason for the issuance and its impact on the Issuer. In relation to the different types of notes that may be issued under the program, GS Finance Corp. has included in this Base Prospectus all of the necessary information except for information which is not known at the date of this Base Prospectus and which can only be determined at the time of an individual issue of a tranche of notes.

Any information relating to the notes which is not included in this Base Prospectus and which is required in order to complete the necessary information in relation to a tranche of notes will be contained either in the relevant final terms or in a further draw-down prospectus.

For a tranche of notes which is the subject of final terms, those final terms will, for the purposes of that tranche only, complete this Base Prospectus and must be read in conjunction with this Base Prospectus.

In connection with the issue of any tranche of notes, Goldman Sachs International (or persons acting on its behalf) may over-allot notes (provided that, in the case of any tranche of notes to be listed on the Official List and admitted to trading on the Main Market of the London Stock Exchange, the aggregate principal amount of notes allotted does not exceed 105 per cent of the aggregate principal amount of the relevant tranche) or effect transactions with a view to supporting the market price of the notes at a level higher than that which might otherwise prevail. However, there is no assurance that Goldman Sachs International (or persons acting on its behalf) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate public disclosure of the final terms of the offer of the relevant tranche of notes is made and, if begun, may cease at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant tranche of notes and 60 days after the date of the allotment of the relevant tranche of notes. Any stabilization action or over-allotment must be conducted by Goldman Sachs International (or persons acting on its behalf) in accordance with all applicable laws and rules.

Any insurance company or fiduciary of a pension plan or other employee benefit plan that is subject to the prohibited transactions rules of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), or the Internal Revenue Code of 1986, as amended (the "Code"), including an IRA or a Keogh plan (or a governmental plan to which similar prohibitions apply), and that is considering purchasing the notes with the assets of the insurance company or the assets of the plan, should consult with its counsel regarding whether the purchase or holding of the notes could become a "prohibited transaction" under ERISA, the Code or any substantially similar prohibition in light of the representations a purchaser or holder in any of the above categories is deemed to make by purchasing and holding the notes. This is discussed in more detail under "Employee Retirement Income Security Act" below.

#### **IMPORTANT – PROHIBITION OF SALES TO EEA RETAIL INVESTORS**

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (the "EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIPs Regulation.

#### **IMPORTANT – PROHIBITION OF SALES TO UK RETAIL INVESTORS**

The notes are not be offered, sold or otherwise made available to any retail investor in the UK. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 ("FSMA") and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA. Consequently no key information document required by the PRIIPs Regulation as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

#### **Benchmark Regulation**

Amounts payable under the notes may be calculated or otherwise determined by reference to EURIBOR, the Euro Interest Swap Rate, LIBOR, SOFR and the USD CMS Rate. As of the date of this Base Prospectus, the administrator of LIBOR, the Euro Interest Swap Rate, and the USD CMS Rate, ICE Benchmark Administration Limited, and the administrator of EURIBOR, the European Money Markets Institute, appear on the register of administrators and benchmarks maintained by the FCA pursuant to Article 36 of Regulation (EU) 2016/1011 as it forms part of UK domestic law by virtue of the EUWA (the "UK Benchmark Regulation"). As of the date of this Base Prospectus, the administrator of SOFR, the Federal Reserve Bank of New York, does not appear on the FCA register. As far as each of the Issuer and the Guarantor is aware, the Federal Reserve Bank of New York, as administrator of SOFR, is not required to be registered by virtue of Article 2 of the UK Benchmark Regulation.

In addition, amounts payable under the notes may be calculated or otherwise determined by reference to other base rates or indices or combinations of indices as indicated in the applicable final terms. Any such base rate or index may constitute a benchmark for the purposes of the Benchmark Regulation. If any such base rate or index does constitute such a benchmark the applicable final terms will indicate whether or not the benchmark is provided by an administrator included in the ESMA Benchmarks Register.

Not every base rate or index will fall within the scope of the Benchmark Regulation. Furthermore, transitional provisions in the Benchmark Regulation may have the result that the administrator of a particular benchmark is not required to appear in the register of administrators and benchmarks at the date of the applicable final terms. The registration status of any administrator under the Benchmark Regulation is a matter of public record and, save where required by applicable law, we do not intend to update this Base Prospectus or the applicable final terms to reflect any change in the registration status of the administrator.

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#### **OVERVIEW OF THE PROGRAM**

The following is an overview of the Series B euro medium-term notes program of GS Finance Corp. guaranteed by The Goldman Sachs Group, Inc. and should be read as an introduction to, and in conjunction with, the remainder of this Base Prospectus, including any documents incorporated by reference therein, and the applicable final terms, and you should base your investment decision on a consideration of this Base Prospectus, including any documents therein, and the applicable final terms, and you should base your investment decision on a consideration of this Base Prospectus, including any documents incorporated by reference therein, and the applicable final terms as a whole. This overview constitutes a general description of the Series B euro medium-term notes program for the purposes of Article 25(1) of Commission Delegated Regulation (EU) 2019/980 as it forms part of domestic law by virtue of the EUWA (the "UK Prospectus Regulation Implementing Regulation").

Issuer	GS Finance Corp.
Description of Issuer	GS Finance Corp. is a Delaware corporation and a wholly owned subsidiary of The Goldman Sachs Group, Inc. created for the primary purpose of providing Goldman Sachs with financing for its operations by issuing securities to investors and lending the net proceeds therefrom to The Goldman Sachs Group, Inc. and/or its subsidiaries. GS Finance Corp. is a finance company and is engaged in no activity other than the raising of capital in order to make it available to its parent company or to undertakings affiliated thereto. Its principal executive office is located at 200 West Street, New York, NY 10282, U.S.A.
LEI (Issuer)	549300FR80KBVO6DRL61
Website of the Issuer	Our internet address is <u>www.goldmansachs.com</u> . Information on our website does not form part of this Base Prospectus unless incorporated by reference into this Base Prospectus.
Guarantor	The Goldman Sachs Group, Inc.
LEI (Guarantor)	784F5XWPLTWKTBV3E584
Guarantee	The payment of principal of, and any interest and premium on, the notes we may offer will be fully and unconditionally guaranteed by The Goldman Sachs Group, Inc. The guarantee will remain in effect until the entire principal of, and interest and premium, if any, on the notes has been paid in full or discharged in accordance with the provisions of the fiscal agency agreement, or otherwise fully defeased by us or by The Goldman Sachs Group, Inc. The guarantee of notes of GS Finance Corp. will rank equally in right of payment with all senior indebtedness of The Goldman Sachs Group, Inc. Because The Goldman Sachs Group, Inc. is a holding company, its ability to perform its obligations on the guarantees endorsed on our notes will depend in part on its ability to participate in distributions of assets from its subsidiaries.
Dealers	We may offer and sell the notes to or through one or more dealers or directly to purchasers on a continuous or delayed basis.
	Dealers include Goldman Sachs International and any other dealers we may, from time to time, appoint.
Fiscal agent, registrar and paying agent	The Bank of New York Mellon.

Calculation agent	We have initially appointed Goldman Sachs International as calculation agent. We may at any time, without your consent and without notifying you, terminate the appointment of any calculation agent and appoint additional calculation agents.
Use of proceeds	We will lend the net proceeds from sales of the notes to The Goldman Sachs Group, Inc. and/or its subsidiaries. Goldman Sachs expects to use the proceeds from such loans to provide additional funds for its operations and for other general corporate purposes.
Issuance in series	Each of the Series B euro medium-term notes constitute a single, distinct series of notes. We may from time to time issue additional series, which may have different terms.
Currencies	Notes will be denominated in U.S. dollars or other currencies, as specified in the applicable final terms.
Denominations	Notes denominated in euros will have minimum denominations of €100,000, and notes denominated in any other currency will have minimum denominations equal to at least €100,000.
Form of notes	We will issue each note in registered form. If the applicable final terms state that the notes are to be issued under NSS and that they are intended to be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations, then the notes will be registered in the name of a nominee for a common safekeeper for Euroclear and Clearstream, Luxembourg and we will deliver these notes to a common safekeeper for Euroclear and Clearstream, Luxembourg. Delivering the notes to a common safekeeper does not necessarily mean that the notes will be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any time or all times during their life.
	Global notes in registered form which are not issued under NSS will be deposited with, and registered in the name of a nominee of, a common depositary for Euroclear and Clearstream, Luxembourg or other clearing system as specified in the applicable final terms
Types of notes	We may issue fixed rate notes (including zero coupon notes), floating rate notes, and indexed notes.
Stated Maturity	In general, notes will have a stated maturity of up to 40 years from the date of issue.
Interest-bearing notes	Notes may bear interest at a fixed or floating rate. Fixed rate notes include zero coupon notes, and other discount securities, which are issued at a price lower than the face amount.
	Floating rate notes bear interest at rates based on one or more of the base rates specified in the Base Prospectus or the applicable final terms.
	A base rate may be adjusted by adding or subtracting a specified number of basis points or multiplying it by a specified percentage and

	may be subject to a minimum rate or a maximum rate, as specified in the applicable final terms.
	Indexed notes bear interest at rates determined at least in part by reference to, directly or indirectly, one or more underlyers. Indexed notes are further categorized as having one or more of the following features: "range accrual", "steepener/flattener", "Asian absolute performance", "digital", "outperformance" and "participation".
Sinking fund	Unless otherwise indicated in the applicable final terms, the notes will not be entitled to the benefit of a sinking fund.
Redemption at our option	Unless otherwise specified in the applicable final terms, we will not be entitled to redeem the notes before maturity, provided that, if the applicable final terms specify "Additional Redemption Rights at the Option of the Issuer" to be applicable, we may redeem the notes in the event of certain developments involving an original primary rate event, a change in law (including a change in tax law) or in connection with the imposition of United States withholding taxes for which we have agreed to pay additional amounts.
Payment of additional amounts	Unless otherwise specified in the applicable final terms, we will make all payments on the notes without deducting U.S. withholding taxes, unless we are required by law to do so and, if we are required by law to deduct U.S. withholding taxes, we will not pay additional amounts on those payments unless the applicable final terms provide for the gross- up of any payments due on the notes and only under certain circumstances as described below under "Description of the Program — Payment of Additional Amounts."
Mergers and similar transactions	Neither we nor The Goldman Sachs Group, Inc. will merge or consolidate with another corporation or corporate entity, unless certain conditions are met.
Events of default and remedies	If an event of default occurs and is continuing (the default not having been cured or waived as provided under "— Meetings, Modification and Waiver of Covenants" below), the holder of an affected note may, at its option, by written notice to us and the fiscal agent, declare the principal amount of its note to be immediately due and payable. If the event of default occurs because of events in bankruptcy, insolvency or reorganization relating to GS Finance Corp. or The Goldman Sachs Group, Inc., the principal amount of the notes will be automatically accelerated, without any action by the fiscal agent or any holder.
Meetings, modification and waiver of covenants	The fiscal agency agreement contains provisions for convening meetings of holders to consider matters affecting their interests. Certain changes require each affected holder's approval, others require no approval by holders and still others require the approval of two-thirds of the holders.

**Payment mechanics for notes** Unless otherwise specified in the applicable final terms, all payments on notes will be made in the applicable specified currency, subject to certain exceptions.

We will make payments on a global note in accordance with the applicable policies of the relevant clearing systems which, unless specified in the applicable final terms will be Euroclear and Clearstream, Luxembourg. We will make payments on a note in registered non-global form by paying interest due on an interest payment date to the holder at the address shown on the register for such notes as of the close of business on the regular record date and all other payments by check or via wire transfer at the corporate trust office of the fiscal agent and the office of the paying agent, against surrender of the note.

- Governing law New York
- Listing and admission to Application has been made to admit the notes to trading on the Main Market of the London Stock Exchange and listing on the Official List of the London Stock Exchange unless otherwise specified in the applicable final terms. However, we are under no obligation to maintain the listing of any notes that are listed.
- **Clearing systems** Unless otherwise specified in the applicable final terms, Euroclear and Clearstream, Luxembourg.
- Market-making This Base Prospectus may be used by Goldman Sachs International in connection with offers and sales of the notes in market-making transactions.
- **Status of notes under the U.S.** The notes and guarantees are not, and will not be, registered under the U.S. Securities Act of 1933 and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in transactions exempt from the registration requirements.
- **Selling restrictions** For a description of certain restrictions on offers, sales and deliveries of the notes and the distribution of offering material in certain jurisdictions, see "Plan of Distribution" and the applicable final terms.
- We face a variety of risks, including market, liquidity, credit, Risk factors operational, legal, regulatory and reputational risks. In addition, the notes are subject to a number of risks, including those related to credit market conditions, interest rate levels, The Goldman Sachs Group, Inc.'s credit rating, global market conditions, certain tax-related risks as well as the risk that the notes may not have an active trading market. Notes denominated or payable in or linked to foreign currencies, or linked to an underlying asset or index, are subject to additional risks, including that you may lose all or a portion of the principal invested and may receive no interest, the volatility of the indices or currencies. Notes linked to benchmark underlyers such as LIBOR and EURIBOR also face additional risk, including consequences that may have a material adverse effect on the return on, value of, and market for any such notes. The Goldman Sachs Group may also engage in business activities that are adverse to your interests.

For more information see "Risk Factors" on page 12. You should understand these risks before making any investment decision

#### **RISK FACTORS**

An investment in the notes is subject to the risks described below, together with any risk factors set out in any documents incorporated by reference. You should carefully review these risks as well as the terms and conditions of the notes described herein and in the related Final Terms. Your notes may be a riskier investment than ordinary debt or most other securities. You should carefully consider whether the notes are suited to your particular circumstances, including to consult your own professional advisers as necessary. We do not give to you as a prospective purchaser of notes any assurance or guarantee as to the merits, performance or suitability of such notes, and you should be aware that we act as an arm's length contractual counterparty and not as an advisor or fiduciary.

#### **Risk Factors in Relation to the Guarantor**

For the purposes of this section entitled "Risk Factors – Risk Factors in Relation to the Guarantor", the terms "our", "us", "its" and "Group, Inc." mean The Goldman Sachs Group, Inc.

#### Market Risks

See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) Our businesses have been and may in the future be adversely affected by conditions in the global financial markets and broader economic conditions. (page 28 of the 2020 Form 10-K);

(b) Our businesses have been and may in the future be adversely affected by declining asset values, particularly where have net "long" positions, receive fees based on the value of assets managed, or receive or post collateral. (page 29 of the 2020 Form 10-K);

(c) Our market-making activities have been and may in the future be affected by changes in the levels of market volatility. (page 29 of the 2020 Form 10-K);

(d) Our investment banking, client intermediation, asset management and wealth management businesses have been adversely affected and may in the future be adversely affected by market uncertainty or lack of confidence among investors and CEOs due to declines in economic activity and other unfavorable economic, geopolitical or market conditions. (page 30 of the 2020 Form 10-K); and

(e) Our asset management and wealth management businesses have been and may in the future be adversely affected by the poor investment performance of our investment products or a client preference for products other than those which we offer or for products that generate lower fees. (page 30 of the 2020 Form 10-K).

#### **Liquidity Risks**

### See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) Our liquidity, profitability and businesses may be adversely affected by an inability to access the debt capital markets or to sell assets. (pages 30-31 of the 2020 Form 10-K);

(b) Our 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. (page 31 of the 2020 Form 10-K);

(c) Reductions in our credit ratings or an increase in our credit spreads may adversely affect our liquidity and cost of funding. (page 32 of the 2020 Form 10-K); and

(d) Group Inc. is a holding company and is its liquidity depends on payments from its subsidiaries, many of which are subject to legal, regulatory and other restrictions on providing funds or assets to Group Inc. (pages 32-33 of the 2020 Form 10-K).

#### Credit Risks

### See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) Our businesses, profitability and liquidity may be adversely affected by deterioration in the credit quality of or defaults by third parties. (page 33 of the 2020 Form 10-K);

(b) Concentration of risk increases the potential for significant losses in our market-making, underwriting, investing and financing activities. (pages 33-34 of the 2020 Form 10-K); and

(c) Derivative transactions and delayed documentation or settlements may expose us to credit risk, unexpected risks and potential losses. (page 34 of the 2020 Form 10-K).

#### Market Developments and General Business Environment Risks

### See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) Our businesses, financial condition, liquidity and results of operations have been and may in the future be adversely affected by the COVID-19 pandemic. (pages 35-36 of the 2020 Form 10-K);

(b) Our strategy with respect to Brexit may not be effective. (page 36 of the 2020 Form 10-K);

(c) Certain of our businesses, our funding instruments and financial products may be adversely affected by changes in or the discontinuance of Interbank Offered Rates (IBORs), in particular LIBOR. (pages 36-37 of the 2020 Form 10-K);

(d) Certain of our businesses and our funding instruments may be adversely affected by changes in other reference rates, currencies, indexes, baskets or ETFs to which products we offer or funding that we raise are linked. (page 37 of the 2020 Form 10-K); and

(e) We face enhanced risks as new business initiatives and acquisitions lead us to engage in new activities, operate in new locations, transact with a broader array of clients and counterparties and expose us to new asset classes and new markets. (pages 37-38 of the 2020 Form 10-K).

#### **Operational Risks**

### See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) A failure in our operational systems or infrastructure, or those of third parties, as well as human error, malfeasance or other misconduct, could impair our liquidity, disrupt our businesses, result in the disclosure of confidential information, damage our reputation and cause losses. (pages 38-40 of the 2020 Form 10-K);

(b) A failure to protect our computer systems, networks and information, and our clients' information, against cyber attacks and similar threats could impair our ability to conduct our businesses, result in the disclosure, theft or destruction of confidential information, damage our reputation and cause losses. (pages 40-42 of the 2020 Form 10-K);

(c) We may incur losses as a result of ineffective risk management processes and strategies. (page 42 of the 2020 Form 10-K);

(d) We may incur losses as a result of unforeseen or catastrophic events, including pandemics, terrorist attacks, extreme weather events or other natural disasters. (page 42 of the 2020 Form 10-K); and

(e) Climate change concerns could disrupt our businesses, adversely affect client activity levels, adversely affect the creditworthiness of our counterparties and damage our reputation. (page 43 of the 2020 Form 10-K).

#### Legal and Regulatory Risks

### See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) Our businesses and those of our clients are subject to extensive and pervasive regulation around the world. (pages 43-45 of the 2020 Form 10-K);

(b) A failure to appropriately identify and address potential conflicts of interest could adversely affect our businesses. (page 45 of the 2020 Form 10-K);

(c) We may be adversely affected by increased governmental and regulatory scrutiny or negative publicity. (pages 45-46 of the 2020 Form 10-K);

(d) Substantial civil or criminal liability or significant regulatory action against us could have material adverse financial effects or cause us significant reputational harm, which in turn could seriously harm our business prospects. (page 46 of the 2020 Form 10-K);

(e) In conducting our businesses around the world, we are subject to political, legal, regulatory and other risks that are inherent in operating in many countries. (pages 46-47 of the 2020 Form 10-K);

(f) The application of regulatory strategies and requirements in the U.S. and non-U.S. jurisdictions to facilitate the orderly resolution of large financial institutions could create greater risk of loss for Group Inc.'s security holders. (pages 47-48 of the 2020 Form 10-K);

(g) The application of Group Inc.'s proposed resolution strategy could result in greater losses for Group Inc.'s security holders. (pages 48-49 of the 2020 Form 10-K); and

(h) Our commodities activities, particularly our physical commodities activities, subject us to extensive regulation and involve certain potential risks, including environmental, reputational and other risks that may expose us to significant liabilities and costs. (page 49 of the 2020 Form 10-K).

#### **Competition Risks**

### See the following risk factors as incorporated by reference from the 2020 Annual Report on Form 10-K (as defined below in "Documents Incorporated by Reference") in the following order:

(a) Our results have been and may in the future be adversely affected by the composition of our client base. (pages 49-50 of the 2020 Form 10-K);

(b) The financial services industry is highly competitive. (page 50 of the 2020 Form 10-K);

(c) The growth of electronic trading and the introduction of new trading technology has increased competition. (page 50 of the 2020 Form 10-K); and

(d) Our businesses would be adversely affected if we are unable to hire and retain qualified employees. (page 51 of the 2020 Form 10-K).

#### **Risk Factors in Relation to the Notes**

#### **Risk Factors Related to the Value and Liquidity of the Notes**

#### The Market Price of Any Notes We May Issue May Be Influenced by Many Unpredictable Factors and If You Buy a Note and Sell It Prior to the Stated Maturity Date, You May Receive Less Than the Face Amount of Your Note

The following factors, most of which are beyond our control, will influence the market price of any notes we may issue:

- economic, military, financial, regulatory, political, terrorist and other events that affect securities generally;
- interest and yield rates in the market;
- the time remaining until a note matures;
- the creditworthiness of Goldman Sachs Finance Corp. and the Goldman Sachs Group, Inc., whether actual or perceived, and including actual or anticipated upgrades or downgrades in Goldman Sachs Finance Corp.'s credit ratings or the Goldman Sachs Group Inc.'s credit ratings or changes in other credit measures; and
- in the case of an indexed note, the market price of the relevant index or indices (and the index components) and the volatility — i.e., the frequency and magnitude of changes in the market price of the relevant index (and the index components).

Without limiting the foregoing, the market value of your notes may be negatively impacted by increasing interest rates. Such adverse impact of increasing interest rates could be significantly enhanced in notes with longer-dated maturities, the market values of which are generally more sensitive to increasing interest rates.

As a result of these and other factors, if you buy a note and sell it prior to maturity, you may receive less than the outstanding face amount of your note. Moreover, these factors interrelate in complex ways, and the effect of one factor may offset or enhance the effect of another factor.

The issue price and/or offer price of the notes may include subscription fees, placement fees, direction fees, structuring fees and/or other additional costs. Any such fees and costs may not be taken into account for the purposes of determining the price of such notes on the secondary market and could result in a difference between the original issue price and/or offer price, the theoretical value of the notes, and/or the actual bid/offer price quoted by any intermediary in the secondary market. Any such difference may have an adverse effect on the value of the notes, particularly immediately following the offer and the issue date relating to such notes, where any such fees and/or costs may be deducted from the price at which such notes can be sold by the initial investor in the secondary market.

#### Changes in Interest Rates Are Likely to Affect the Market Price of Any Notes We May Issue

We expect that the market price of any notes we may issue will be affected by changes in interest rates, although these changes may affect such notes and a traditional debt security to different degrees. In general, if interest rates increase, we expect that the market value of a fixed income instrument which paid interest payments and an amount equal to the outstanding face amount of a note you may purchase on the same schedule as that note would decrease, whereas if interest rates decrease, we expect that the market value of such a fixed income instrument would increase.

#### Any Notes We May Issue May Not Have an Active Trading Market; The Aggregate Nominal Amount Outstanding at Any Given Time May Be Significantly Less Than That Outstanding on the Issue Date, and This Could Have a Negative Impact on Your Ability to Sell the Notes in the Secondary Market

Even if your notes are listed on a stock exchange, a secondary market for any notes we may issue is unlikely to develop. Even if a secondary market for a note develops, it may not provide significant liquidity and we and/or our affiliates have no obligation to make a market with respect to the note and make no commitment to make a market in or repurchase the note. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for the note in any secondary market could be substantial. There may be less liquidity in the secondary market for the notes if they are exclusively offered to retail investors without any offer to institutional investors.

If so indicated in the relevant final terms, on the issue date a specified amount of notes will be issued by GS Finance Corp. to and made available for sale by Goldman Sachs International or another entity (in its capacity as dealer), and as soon as practicable thereafter, listed and admitted to trading on one or more regulated markets of any European Economic Area Member State ("EEA Member State") for purchase by investors. However, Goldman Sachs International (in its capacity as dealer of the notes issued by GS Finance Corp.) will reserve its right to have some or all of the notes that it holds cancelled at any time prior to the final maturity of the notes, such right to be exercised in accordance with applicable laws, the terms and conditions of the relevant notes and the applicable rules of the relevant regulated markets of any EEA Member State, Goldman Sachs International (in its capacity as dealer of the notes issued by GS Finance Corp.) may cancel some or all of any Notes which have not been purchased by investors at such time. Accordingly, the total amount of notes outstanding at any time may be significantly less than the amount issued on the relevant issue date and this could have a negative impact on an investor's ability to sell the notes in the secondary market. Notification of any such cancellation of notes will be made according to the rules of the relevant regulated markets.

### Changes in the Credit Ratings of The Goldman Sachs Group, Inc. May Affect the Market Price of a Note

The Goldman Sachs Group, Inc.'s credit ratings are an assessment of its ability to pay its obligations, including its guarantee of any notes we may issue. Consequently, actual or anticipated changes in The Goldman Sachs Group, Inc.'s credit ratings may affect the market price of a note. However, because the return on a note is typically dependent upon certain factors in addition to our ability to pay our obligations on the note, an improvement in The Goldman Sachs Group, Inc.'s credit Ratings" for more information.

#### **Risk Factors Related to Certain Product Terms or Features**

### If Your Final Terms Specify That We Have the Right to Redeem Your Note at Our Option, the Value of Your Notes May Be Adversely Affected.

Your final terms may specify that we have the right to redeem your note at our option. Even if we do not exercise this option, our ability to do so may adversely affect the value of your notes.

### Public Offers of the Notes May Be Subject to Extension, Postponement, Revocation and/or Termination

If the notes are distributed by means of a public offer, under certain circumstances indicated in the applicable final terms, the Issuer and/or the other entities indicated in the applicable final terms will have the right to withdraw or revoke the offer, and the offer will be deemed to be null and void according to the terms indicated in the applicable final terms.

The Issuer and/or the other relevant entities specified in the applicable final terms may also terminate the offer early by immediate suspension of the acceptance of further subscription requests and by giving

notice to the public in accordance with the applicable final terms. Any such termination may occur even where the maximum amount for subscription in relation to that offer (as specified in the applicable final terms) has not been reached. In such circumstances, the early closing of the offer may have an impact on the aggregate number of notes issued and, therefore, may have an adverse effect on the liquidity of the notes.

Furthermore, under certain circumstances indicated in the applicable final terms, the Issuer and/or the other entities indicated in the applicable final terms will have the right to extend the offer period and/or to postpone the originally designated issue date, and related interest payment dates and the maturity date.

#### Sales and Issuances of Notes in Italy Through the MOT May be on Terms and Subject to Conditions That Differ From Typical Offers of Debt Securities in Italy, Including in Certain Cases the Condition That the Notes Be Approved for Admission to Trading on the MOT by Borsa Italiana and the Right of The Goldman Sachs Group, Inc. to Terminate the Offer Prior to Issuance

The applicable final terms for an offering may indicate that notes are to be sold in Italy by means of a public offering through the MOT, the electronic bond market operated by Borsa Italiana, S.p.A. ("Borsa Italiana") on terms and subject to conditions described in the applicable final terms (an "MOT OPV Offer"). The terms and conditions of such MOT OPV Offer may differ from the typical terms and conditions of primary and secondary sales of debt securities in Italy. To the extent specified in the applicable final terms, investors may purchase notes offered in an MOT OPV Offer during the offer period by submitting irrevocable purchase offers through dealers/intermediaries appointed by the The Goldman Sachs Group, Inc. and/or through certain other intermediaries authorized by or operating through entities authorized by Borsa Italiana to execute transactions on the MOT. The acceptance of a purchase offer by an investor does not alone constitute the completion of a contract with respect to the notes. The effectiveness of a contract is subject not only to correct execution of the purchase offer but also to the issuance of the notes, and may be subject to (i) the right of The Goldman Sachs Group, Inc., and any dealers or intermediaries with termination rights as indicated in the applicable final terms, to terminate the MOT OPV Offer prior to issuance and (ii) Borsa Italiana's approval of the notes for admission to trading on the MOT at the end of the offer period. In addition, if indicated in the applicable final terms, issuance of notes offered through an MOT OPV Offer may be subject to the condition that there be a minimum amount of the notes accepted for sale. If for any reason The Goldman Sachs Group. Inc. or any dealer or intermediary with termination rights elects to terminate the offer, or Borsa Italiana has not approved the admission of the notes to trading on the MOT (and such approval is a condition to the offer) or any other condition of the offer is not met, no notes will be issued and the acceptance of the investor's purchase offer will not constitute the completion of a contract.

# Holders of our notes, as holders of The Goldman Sachs Group, Inc.'s guarantee, could be at greater risk that such guarantee will be structurally subordinated if the Goldman Sachs Group, Inc. sells or transfers its assets substantially as an entirety to one or more of its subsidiaries.

With respect to any notes, The Goldman Sachs Group, Inc. may sell or transfer its assets substantially as an entirety, in one or more transactions, to one or more entities, provided that the assets of The Goldman Sachs Group, Inc. and its direct or indirect subsidiaries in which it owns a majority of the combined voting power, taken together, are not sold or transferred substantially as an entirety to one or more entities that are not such subsidiaries. If The Goldman Sachs Group, Inc. sells or transfers its assets substantially as an entirety to its subsidiaries, third-party creditors of its subsidiaries would have additional assets from which to recover on their claims while holders of our notes, as holders of The Goldman Sachs Group, Inc.'s guarantee, would be structurally subordinated to creditors of The Goldman Sachs Group, Inc.'s subsidiaries with respect to such assets.

#### The Notes We May Issue Are Not Insured by the Federal Deposit Insurance Corporation

None of the notes offered hereby will be a deposit insured or guaranteed by the Federal Deposit Insurance Corporation ("FDIC") or any other government authority, and do not benefit from the protections offered by any government or governmental or private agency or deposit protection scheme in any jurisdiction. The Series B euro medium-term notes will rank pari passu with all other unsecured and unsubordinated indebtedness of GS Finance Corp. The Goldman Sachs Group, Inc. guarantee of notes will rank equally in right of payment with all senior indebtedness of The Goldman Sachs Group, Inc.

#### Considerations Relating to Floating Rate Notes

#### A Negative Floating Base Rate May Reduce Any Positive Spread Payable on Your Notes

If your note is a floating rate note, it may bear interest at a rate equal to a specified base rate plus a percentage or a specified number of basis points (called the spread). If your final terms indicate "Base Rate 0% Floor" as "Not Applicable", then the specified base rate may be negative for some or all interest periods. For any interest period, if the specified base is negative, then it will reduce the interest rate payable for such interest period below the specified spread, potentially to zero. Accordingly, you may receive an interest rate on your notes that is lower than the specified spread, and this would adversely affect the value of and return on your notes.

#### Considerations Relating to Indexed Notes

We use the term "indexed notes" to mean any notes whose value is linked to any underlying asset or index. Indexed notes may present a high level of risk, and investors in certain indexed notes may lose the value of their entire investment or part of it, as the case may be, depending on the structure as indicated in the final terms. In addition, the treatment of indexed notes for U.S. federal income tax purposes is often unclear due to the absence of any authority specifically addressing the issues presented by any particular indexed note. Thus, if you propose to invest in indexed notes, you should independently evaluate the federal income tax consequences of purchasing an indexed note that apply in your particular circumstances. You should also read "United States Taxation" below for a discussion of U.S. tax matters.

#### Considerations Relating to Indexed Notes Generally

#### The Return on Indexed Notes May Be Below the Return on Similar Securities

Depending on the terms of an indexed note, as specified in the applicable final terms, you may not receive any periodic interest payments or receive only very low payments on the note. As a result, the overall return on a note may be less than the amount you would have earned by investing the face amount of a note in a non-indexed debt security that bears interest at a prevailing market fixed or floating rate.

## Payments on Indexed Notes May Be Linked to the Average Performance of the Underlyers and Not the Overall Change in the Underlyer Performance

The formula used to determine the amounts payable on an indexed note may be calculated by reference to the average performance of the underlyer or underlyers over a number of observation dates and not by reference to the overall change in the underlyer or underlyers over the life of your note. In this case, relevant underlyer levels on one or more of these dates may be sufficiently low or high to offset any overall gain or decline in the underlyer, in which case you might receive no payment amount on the note or a payment amount that is less than the amount that would have been paid had the payment amount been linked to the change in the underlyer from the issue date (or other date, as specified in the applicable final terms) to the final observation date or the stated maturity date, as the case may be.

## Use of Participation Factors Over 100 Percent May Result in Disproportionate Exposure to the Negative Performance of the Underlyer

Where the applicable final terms of the notes provide that the redemption amount of such note is based upon the performance of the underlyer multiplied by a participation factor which is over 100 percent, a purchaser may participate disproportionately in any positive performance and/or may have a disproportionate exposure to any negative performance of the underlyer. Due to this leverage effect, the notes represent a very speculative and risky form of investment since any loss in the value of the underlyer carries the risk of a correspondingly higher loss.

### The Issuer of a Security or Currency That Serves as Part of an Underlyer Could Take Actions That May Adversely Affect an Indexed Note

The issuer of a security or currency that serves as an underlyer or part of an underlyer for an indexed note will have no involvement in the offer and sale of the note and no obligations to the holder of the note. The issuer of such security or currency may take actions, such as a merger or sale of assets, without regard to the interests of the holder. Any of these actions could adversely affect the value of a note based on an underlyer linked to such security.

If the underlyer for an indexed note includes a non-U.S. dollar currency or other asset denominated in a non-U.S. dollar currency, the government that issues that currency will also have no involvement in the offer and sale of the indexed note and no obligations to the holder of that note. That government may take actions that could adversely affect the value of such note. See "— Considerations Relating to Notes Denominated or Payable in or Linked to Currencies Other Than Your Own Principal Currency — Government Policy Can Adversely Affect Foreign Currency Exchange Rates and an Investment in a Foreign Currency Note" below for more information about these kinds of notes.

#### An Indexed Note May Be Linked to a Volatile Underlyer, Which May Adversely Affect an Investment

Some underlyers are highly volatile, which means that their value may change significantly, up or down, over a short period of time. It is impossible to predict the future performance of an underlyer based on its historical performance. The amount of principal or interest that can be expected to become payable on an indexed note may vary substantially from time to time. Because the amount of principal or interest payable on an indexed note is generally calculated based on the value of the relevant underlyer on a specified date or over a limited period of time, volatility in the underlyer increases the risk that the return on an indexed note may be adversely affected by a fluctuation in the level of the relevant underlyer.

The volatility of an underlyer may be affected by financial, political, military or economic events, including governmental actions, or by the activities of participants in the relevant markets. Any of these events or activities could adversely affect the value of an indexed note.

## Underlyers May Move in Opposite Directions, Which May Affect the Amount You Receive on an Indexed Note Linked to a Basket of Underlyers

If you purchase an indexed note, the amount of interest you may receive on the note, if any, may be based on the performance of a basket of underlyers. The market price for different types of underlyer may move in opposite directions. As a result, the level of the underlyers to which the note is linked may move such that the underlyer performance of one or more basket underlyers may offset or be offset by the underlyer performance of one or more of the other basket underlyers, which ultimately may result in a decrease in the overall return on the note or no interest payments on your note.

### If the Level of an Underlyer Changes, the Market Price of an Indexed Note May Not Change in the Same Manner

An indexed note may trade quite differently from the performance of the relevant underlyer or underlyers. Changes in the level of the underlyer may not result in a comparable change in the market price of your note. Some of the other reasons for this disparity are discussed above under "— Considerations Relating to Notes Generally — The Market Price of Any Notes We May Issue May Be Influenced by Many Unpredictable Factors and If You Buy a Note and Sell It Prior to the Stated Maturity Date, You May Receive Less Than the Face Amount of Your Note".

### If You Purchase an Indexed Note, You Will Have No Rights with Respect to any Underlyer, Securities or Other Underlyer Components to which Your Note is Linked.

Investing in an indexed note will not make you a holder of the underlyer, any securities that comprise the underlyer, or other underlyer components with respect thereto. As a result, you will not have any voting rights, any right to receive dividends or other distributions or any other rights with respect to any

of the underlyer components. Your note will be paid in cash, and you will have no right to receive delivery of any such underlyer components.

#### Special Considerations Relating to Indexed Notes Linked to Inflation Indices

#### Underlyers linked to Inflation Indices or Consumer Price Indices may be subject to significant fluctuations

If one or more of the underlyers of your notes comprise inflation indices, consumer price indices or other formulae linked to a measure of inflation as underlyers, then you are exposed to the performance of such inflation indices or other measurement formulae, which may be subject to significant fluctuations that may not correlate with other indices and may not correlate perfectly with the rate of inflation experienced by you in your home jurisdiction. The return on the notes may be based on a calculation made by reference to an inflation index for a month which is several months prior to the date of payment on the notes and therefore could be substantially different from the level of inflation at the time of the payment on your notes.

#### Special Considerations Relating to Indexed Notes Linked to Stock Indices

#### An Index to Which an Indexed Note Is Linked Could Be Changed or Become Unavailable

Some indices compiled by third parties may consist of or refer to several or many different securities or currencies or other instruments or measures. The compiler of such an index typically reserves the right to alter the composition of the index and the manner in which the value of the index is calculated. An alteration may result in a decrease in the value of or return on an indexed note that is linked to the index. The indices for our indexed notes may include published indices of this kind or customized indices developed by us or our affiliates in connection with particular issues of indexed notes.

A published index may become unavailable, or a customized index may become impossible to calculate in a normal manner, due to events such as war, natural disaster, cessation of publication of the index or a suspension or disruption of trading in one or more securities or currencies or other instruments or measures on which the index is based. If an index becomes unavailable or impossible to calculate in a normal manner, the terms of a particular indexed note may allow us to delay determining the amount payable as principal or interest on an indexed note or may use an alternative method to determine the value of the unavailable index. Alternative methods of valuation are generally intended to produce a value similar to the value resulting from reference to the relevant index. However, it is unlikely that any alternative method of valuation we use will produce a value identical to the value that the actual index would produce. If we use an alternative method of valuation for a note linked to an index of this kind, the value of the note, or the rate of return on it, may be lower than it otherwise would be.

Some indexed notes are linked to indices that are not commonly used or have been developed only recently. The lack of a trading history may make it difficult to anticipate the volatility or other risks associated with an indexed note of this kind. In addition, trading in these indices or their underlying stocks or currencies or other instruments or measures, or options or futures contracts on these stocks or currencies or other instruments or measures, may be limited, which could increase their volatility and decrease the value of the related indexed notes or the rates of return on them.

### If You Purchase an Indexed Note Linked to a Stock Index, the Return on the Note May Not Reflect the Return or Any Distributions, Dividends or Other Payments Made on Any Index Components

In the case of an indexed note, the sponsor of each index to which the note is linked will calculate the level of the relevant index by reference to the market prices of the index securities or other index components with respect thereto included in that index, without taking account of the value of any distributions, dividends or other payments. As a result, if you invest in an indexed note, the return on your note will not reflect the return you would realize if you actually owned the index components and received the distributions, dividends or other payments made on them.

#### Indices of Emerging Markets May be Volatile and Unstable

Where the applicable final terms of the notes reference one or more emerging market stock indices, purchasers of such notes should be aware that the political and economic situation in countries with emerging economies or stock markets may be undergoing significant evolution and rapid development, and such countries may lack the social, political and economic stability characteristic of more developed countries, including a significant risk of currency value fluctuation. Such instability may result from, among other things, authoritarian governments, or military involvement in political and economic decision-making, including changes or attempted changes in governments through extra-constitutional means; popular unrest associated with demands for improved political, economic or social conditions; internal insurgencies; hostile relations with neighbouring countries; and ethnic, religious and racial disaffections or conflict. Certain of such countries may have in the past failed to recognize private property rights and have at times nationalized or expropriated the assets of private companies. As a result, the risks from investing in those countries, including the risks of nationalization or expropriation of assets, may be heightened. In addition, unanticipated political or social developments may affect the values of an underlying asset investment in those countries. The small size and inexperience of the securities markets in certain countries and the limited volume of trading in securities may make the underlying assets illiquid and more volatile than investments in more established markets. There may be little financial or accounting information available with respect to local issuers, and it may be difficult as a result to assess the value or prospects of the indices.

#### The Policies of an Index Sponsor and Changes Affecting an Index or Indices or Any of Its Components Could Affect the Amount Payable on an Indexed Note and Its Market Value

The policies of an index sponsor concerning the calculation of the index level, additions, deletions or substitutions of index components and the manner in which changes affecting the index components or their issuers, such as dividends, reorganizations or mergers, are reflected in the index level could affect the index level and, therefore, the amount payable on any indexed notes we may issue on the stated maturity date and the market value of any such notes prior to such date. The amount payable on an indexed note and its market value could also be affected if the underlyer sponsor changes these policies, for example, by changing the manner in which it calculates the index level, or if the underlyer sponsor discontinues or suspends calculation or publication of the index level, in which case it may become difficult to determine the market value of the note. If events such as these occur or if the index level is not available on any relevant observation date because of a market disruption event or for any other reason, the calculation agent — which initially will be Goldman Sachs International, our affiliate — may determine the index level on any such determination date — and thus the amount payable on the stated maturity date — in a manner it considers appropriate, in its sole discretion.

#### There Is No Affiliation Between the Issuers of Any of the Index Securities Contained in an Equity or Debt Index Included in an Indexed Note and Us, and We Are Not Responsible for Any Disclosure by Such Issuers

The Goldman Sachs Group, Inc. is not affiliated with any of the issuers of the securities which are included in any of the equity or debt indices included in an underlyer, or the sponsor of any of these indices. We and our affiliates may currently or from time to time in the future engage in business with the issuers of other index securities included in any of the equity or debt indices included in an indexed note. Nevertheless, neither we nor any of our affiliates assumes any responsibility for the adequacy or accuracy of any publicly available information about any issuers of index securities. You, as an investor in a note, should make your own investigation into the indices and the issuers of the index securities that make up the relevant index or indices. See the applicable final terms for additional information about the relevant index or indices to which a particular note is linked.

Neither the sponsors of any of the relevant index or indices included in an indexed note nor any of the issuers of the index securities as underlyer sponsor of any index published by it are involved in any offering of notes in any way and none of them has any obligation of any sort with respect to an indexed note. Neither the sponsors of the indices nor any of the issuers of the index securities have any obligation to take your interests into consideration for any reason, including in taking any corporate actions that might affect the market price for your note. Any of the sponsors of any of the indices may decide to discontinue calculating and publishing such index, which would mean that the calculation agent, which unless we

indicate in the applicable final terms will be one of our affiliates, would have discretion in making determinations with respect to such index.

#### Payments on Notes That Reference U.S. Equities May Be Subject to U.S. Tax

Financial instruments that directly or indirectly reference the performance of U.S. equities (including an index or basket that includes U.S. equities) may be subject to withholding tax under Section 871(m) of the Code. While notes issued pursuant to this Base Prospectus will not be subject to withholding under these rules, a holder may still be subject to Section 871(m) tax in respect of the notes in certain limited circumstances even when no withholding is required. Prospective holders of such notes should consult the discussion below under "Taxation – United States Taxation – Dividend Equivalent Payments" for further information.

#### Special Considerations Relating to UDI-Linked Notes

### The Final Redemption Amount You Receive on the Stated Maturity Date May Be Less than the Face Amount of Your Note

If your final terms specify the "UDI-Linked Floor" to be "Not Applicable", then the amount payable on the stated maturity date on any UDI-linked note will be the final redemption amount, which will be an amount equal to the product of the UDI-Linked Notional Amount times the UDI Index Level for the Observation Date, plus any interest amount payable on the stated maturity date. The UDI is a MXN equivalent unit of account indexed to inflation published by the Index Sponsor. The level of Mexican inflation as reflected in the UDI Index has been volatile historically and a decrease in the level of Mexican inflation as of the Observation Date below the Initial Index Level will adversely affect the amount payable at maturity.

## The Final Redemption Amount and Interest Amount on Your Notes Will Not Be Affected by the UDI Index Level for Any Date Other Than for the Observation Date and the Relevant Interest Determination Dates, Respectively

The final redemption amount and any interest amount that may be paid on your UDI-linked notes will be determined based on the UDI Index Level for the Observation Date and the relevant interest determination dates (if any), respectively. Although the UDI Index Level at other times during the life of your note may be greater than for the Observation Date or any interest determination date, you will not benefit from the UDI Index Level at any time other than for such dates. A decrease in the UDI Index Level as of an interest determination date below the Initial Index Level may result in low interest payments on the note. In addition, the overall return on the note may be less than the amount you would have earned by investing the face amount of the note in a non-indexed debt security that bears interest at a prevailing market fixed or floating rate.

Defined terms used in this section "– Special Considerations Relating to UDI-Linked Notes" shall have the meanings set forth under "General Note Conditions – Redemption and Repayment – Redemption at Maturity – UDI-Linked Notes" below.

### The Level of Inflation in Mexico May Decrease Below the Current Level Which May Adversely Affect the Payment Amount on Your Notes

The level of inflation in Mexico may decrease below the current level, and historical Mexican inflation trends may not continue. As a result, the UDI Index Level as calculated for the Observation Date or an interest determination date (if any) may be lower than it would have been had historical trends continued, and you may therefore receive a lower payment amount on your note.

#### Special Considerations Relating to Indexed (Range Accrual) Notes

If the Level of the Underlyer Daily Fixing on the Underlyer Daily Fixing Date Applicable to Any Calendar Day Falls Outside of the Accrual Range for that Underlyer, No Interest Will Accrue for Such Day for the Range Accrual Note

Because of the formula we use to calculate the interest rate applicable to range accrual notes, in the event that for any day on which interest otherwise would accrue on a range accrual note the underlyer daily fixing for the underlyer, calculated as of the applicable underlyer daily fixing date, falls outside of its accrual range, no interest will accrue for such day. Therefore, if the level of the underlyer daily fixing falls outside of its accrual range for each day in the interest periods, you will receive no interest payment for such period. Even if you receive some interest payments on some or all of the interest payment dates, the overall return you earn on your notes may be less than you would have earned by investing in a non-range accrual debt security of a comparable maturity that bears interest at a prevailing market rate.

If the interest payments on a range accrual note are linked to a foreign currency exchange rate or rates, if any currency that is a component of such rate appreciates or depreciates, as the case may be, against the other currency that is a component of such foreign currency exchange rate, to a level where the applicable foreign currency exchange rate falls outside of its respective accrual range, your note will not accrue interest on such days. Even if you receive some interest payments on some or all of the interest payment dates, the overall return you earn on your notes may be less than you would have earned by investing in a non-range accrual debt security of a comparable maturity that bears interest at a prevailing market rate.

#### Special Considerations Relating to Indexed (Digital) Notes

#### You May Not Receive any Interest on Any Interest Payment Date

Whether you receive an interest payment on any interest payment date will depend on the performance of the relevant index or indices relative to their respective barrier levels. Your final terms will specify for each relevant index a performance condition ("less than"; "greater than"; "less than or equal to"; "greater than or equal to") with respect to each applicable barrier level. If the index performance of any index does not meet the specified performance condition with respect to any interest period, you will not receive an interest payment for that interest period. If this occurs in respect of each interest payment date, you will never receive any interest payments and the overall return you earn on your notes will be zero and such return will be less than you would have earned by investing in a note that bears interest at the prevailing market rate.

## The Interest Payments on Your Notes Will Be Limited and Will Not Reflect the Actual Performance of the Underlyers from Observation Date to Observation Date

The interest payment for each interest payment date is different from, and may be less than, an interest payment determined based on the percentage difference of the closing levels of the underlyers between the initial valuation date (or initial averaging dates) and any observation date (or averaging dates) or between two observation dates (or sets of averaging dates). Accordingly, the interest payments, if any, on the notes will be limited, and may be less than the return you could earn on another instrument linked to the underlyers that pay interest payments based on the performance of the underlyers from the trade date to any observation date or from observation date to observation date.

### If the "Worst-Of" Condition Applies to your Indexed (Digital) Notes, Interest Payments On Your Notes Will Be Determined by Reference to the Worst Performing Index Only

If "Worst-Of" is applicable to your Indexed (Digital) note, for each relevant interest period, the index performance of only the worst performing index will be used to determine whether the index performance condition has been met for such interest period, and therefore whether you will receive an interest payment

for such interest period. For any interest period, you will receive an interest payment only if the index performance of each of the specified indices meets or exceeds its corresponding barrier level, as specified in your final terms. Even if the index performance of one or more of the indices to which your note is linked meets or exceeds its corresponding barrier level, as applicable, if the index performance of the worst performing index does not meet or exceed its corresponding barrier level, you will not receive any interest payment for such interest period.

#### If the "Multiple Conditions" Condition Applies to your Indexed (Digital) Notes, You Will Receive an Interest Payment for Any Interest Period Only If All the Indexes Satisfy Their Respective Index Performance Conditions

If "Multiple Conditions" is applicable to your Indexed (Digital) note, for each relevant interest period, you will receive an interest payment only if all the indices satisfy their respective index performance conditions for such interest period. The index performance condition may require that the relative index either appreciate or depreciate in value in order for interest to be paid. In such a case, if the relevant index appreciates in value with as of any observation date, you will not receive any interest payment on the corresponding interest payment date, even though the value index to which your note is linked has increased. For any interest period, even if the index performance of one or more of the indices to which your note is linked meets the performance measure specified with respect to the applicable barrier level, if the index performance of any index does not meet the specified performance level, you will not receive any interest payment for such interest period.

#### Special Considerations Relating to Indexed (OutPerformance) Notes

The Interest Payments on Your Notes Will Be Limited and Will Not Reflect the Actual Performance of the Underlyers from Observation Date to Observation Date. You May Receive No Interest Payments Even if Both Indices Increase or Both Indices Decline.

Your return on the notes depends on the relative performances of the underlyers. If both underlyers have increased as of any observation date, you will not receive any interest on the related interest payment dates if the percentage increase in the level of the primary underlyer has been less than that of the secondary underlyer plus or minus the performance factor specified in your final terms. Likewise, if both underlyers have declined as of any observation date, you will not receive any interest on the related interest payment dates if the percentage decrease of the primary underlyer has been more than that of the secondary underlyer plus or minus a performance factor to be specified in your final terms.

#### Special Considerations Relating to Indexed (Participation) Notes

#### You May Lose Part of Your Investment in the Notes

The amount payable at maturity (final redemption amount) and/or interest payable on an Indexed (Participation) note will be determined by reference to the price, value or level of one or more stock indices, inflation or consumer price indices, interest rates of foreign currency exchange rates and/or one or more baskets of any of these items. We refer to each of these as an "underlyer" or "underlyers". The direction and magnitude of the change in the value of the relevant underlyer will determine the principal amount of an indexed note payable at maturity and/or the amount of interest payable on the interest payment date and the cash value. The terms of a particular Indexed (Participation) note may not provide for the return of the face amount at maturity or a minimum interest rate, and we may issue notes under which investors could lose part of their investment. Thus, if you purchase an Indexed (Participation) note that does not provide for the return of 100% of your principal at maturity, you may lose part of the principal invested and may receive no interest on your investment.

Also, the market price of your notes prior to the stated maturity date may be significantly lower than the purchase price you pay for your notes. Consequently, if you sell your notes before the stated maturity date, you may receive far less than the amount of your investment in the notes.

#### Risk Factors Related to Notes Linked to Benchmark Underlyers such as LIBOR and EURIBOR

#### Regulation and reform of "benchmarks", including LIBOR, EURIBOR and other interest rate, Equity, Foreign Exchange Rate and Other Types of benchmarks may cause such "benchmarks" to perform differently than in the past, or to disappear entirely, or have other consequences which cannot be predicted

The London Interbank Offered Rate ("LIBOR"), the Euro Interbank Offered Rate ("EURIBOR") and other interest rate indices which are deemed to be "benchmarks" are the subject of ongoing national and international regulatory reform. These reforms may cause such "benchmarks" to perform differently than in the past, or to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on the return on, value of and market for any notes linked to such a "benchmark".

On 17 May 2016, the Council of the European Union adopted the EU Regulation on indices used as benchmarks and financial instruments and financial contracts or to measure the performance of investment funds (the "Benchmark Regulation"). The Benchmark Regulation entered into force in June 2016 and became fully applicable in the EU on January 1, 2018 (save that certain provisions, including those related to "critical benchmarks", took effect as at 30 June 2016), subject to certain transitional provisions. The Benchmark Regulation as it forms part of U.K. domestic law by virtue of the EUWA and as amended by the Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 has applied in the UK since the end of the Brexit transition period on 31 December 2020 (the "UK Benchmark Regulation"). The Benchmark Regulation and the UK Benchmark Regulation apply to the contribution of input data to a "benchmark", the provision or administration of a "benchmark" and the use of a "benchmark" in the EU and the UK, respectively. Among other things, it (a) requires benchmark administrators to be authorised or registered as such and to comply with extensive requirements relating to the administration of "benchmarks" and (b) prohibits certain uses by EU or UK supervised entities of "benchmarks" provided by EU administrators which are not authorised or registered in accordance with the Benchmark Regulation (or, if located outside of the EU or the UK, deemed equivalent or recognised or endorsed).

The scope of the Benchmark Regulation and the UK Benchmark Regulation is wide and, in addition to so-called "critical benchmark" indices such as LIBOR and EURIBOR, will apply to many other interest rate indices which are referenced in the notes. The Benchmark Regulation and/or the UK Benchmark Regulation, as applicable, could have a material impact on notes linked to a "benchmark" rate or index, including in any of the following circumstances:

- a rate or index which is a "benchmark" may not be used in certain ways by an EU or UK supervised entity if (subject to applicable transitional provisions) its administrator does not obtain authorisation or registration (or, if a non-EU or non-UK entity, does not satisfy the "equivalence" conditions and is not "recognised" pending an equivalence decision). In such event, depending on the particular "benchmark" and the applicable terms of the notes, the notes could be de-listed, adjusted, redeemed prior to maturity or otherwise impacted; and
- the methodology or other terms of the "benchmark" could be changed in order to comply with the terms of the Benchmark Regulation and/or the UK Benchmark Regulation, and such changes could have the effect of reducing or increasing the rate or level or affecting the volatility of the published rate or level, and could lead to adjustments to the terms of the notes, including the Calculation Agent's determination of the rate or level in its discretion.

The Benchmark Regulation, the UK Benchmark Regulation and any other international, national or other proposals for reform or the general increased regulatory scrutiny of "benchmarks" could increase the costs and risks of administering or otherwise participating in the setting of a "benchmark" and complying with any such regulations or requirements. Such factors may have the effect of discouraging market participants from continuing to administer or contribute to certain "benchmarks", trigger changes in the rules or methodologies used in certain "benchmarks" or lead to the disappearance of certain "benchmarks", including LIBOR (as discussed below). The disappearance of a "benchmark" or changes in the manner of administration of a "benchmark" could result in adjustment to the terms and conditions, early redemption,

discretionary valuation by the calculation agent or change in the relevant benchmark by the calculation agent, delisting or other consequence in relation to notes linked to such "benchmark". Any such consequence could have a material adverse effect on the return on, value of and market for any such notes.

### LIBOR Will Be Discontinued; Discontinuance Dates Will Differ for Different LIBOR Currencies and Tenors

On July 27, 2017, the Chief Executive of the U.K. Financial Conduct Authority ("FCA"), which regulates the LIBOR administrator, announced that the FCA will no longer persuade or compel banks to submit rates for the calculation of LIBOR after 2021. On November 30, 2020, the ICE Benchmark Administration Limited ("IBA"), which is supervised by the UK Financial Conduct Authority, announced a proposal to extend the publication of the most commonly used LIBOR tenors (overnight and one, three, six and 12 months) until June 30, 2023. The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency have strongly encouraged banks to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021. On March 5, 2021, the FCA and IBA announced that all LIBOR settings will either cease to be provided by any administrator or no longer be representative: (i) immediately after December 31, 2021, in the case of all British pound sterling, euro, Swiss franc, and Japanese yen settings, and the one-week and two-month U.S. dollar settings; and (ii) immediately after June 30, 2023, in the case of the remaining U.S. dollar settings.

It is not possible to predict the effect that that these announcements or any such discontinuance will have on USD LIBOR or your notes. If, in respect of any note linked to USD LIBOR, the calculation agent determines that a benchmark transition event and its related benchmark replacement date have occurred with respect to USD LIBOR, then a benchmark replacement will be selected by the calculation agent in accordance with the provisions set forth under "General Note Conditions - Interest Rates -Floating Rate Notes — Effect of Benchmark Transition Event on USD LIBOR Notes" (the benchmark transition provisions). The selection of a benchmark replacement, and any decisions, determinations or elections made by the calculation agent in connection with implementing a benchmark replacement with respect to the notes in accordance with the benchmark transition provisions, could result in adverse consequences to the return on, value of and market for the notes. Further, there is no assurance that the characteristics of any benchmark replacement will be similar to USD LIBOR, or that any benchmark replacement will produce the economic equivalent of USD LIBOR. If, in respect of any EURIBOR note, Euro Interest Swap Rate note, non-USD LIBOR note, or USD CMS Rate note, the calculation agent determines that an original primary rate event and its related adjustment date have occurred, then a replacement primary rate will be selected by the calculation agent in accordance with the provisions set forth under "General Note Conditions -Interest Rates —Floating Rate Notes — Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR Notes and USD CMS Rate Notes" (the original primary rate event provisions). The selection of a replacement primary rate, and any decisions, determinations or elections made by the calculation agent in connection with implementing a replacement primary rate with respect to the notes in accordance with the original primary rate event provisions, could result in adverse consequences to the return on, value of and market for the notes. Further, there is no assurance that the characteristics of any replacement primary rate will be similar to EURIBOR, the Euro Interest Swap Rate, non-USD LIBOR or the USD CMS Rate, as applicable, or that any replacement primary rate will produce the economic equivalent of EURIBOR, the Euro Interest Swap Rate, non-USD LIBOR or the USD CMS Rate, as applicable. See "General Note Conditions - Interest Rates - Floating Rate Notes" on pages 58 to 73.

#### Certain Risks Related to the Secured Overnight Financing Rate

We may issue floating rate notes linked to the Secured Overnight Financing Rate (SOFR). In addition, under the benchmark transition provisions of the notes with respect to USD LIBOR, if a benchmark transition event and its related benchmark replacement date have occurred with respect to USD LIBOR, then the rate of interest on the USD LIBOR notes will be determined based on SOFR.

On June 22, 2017, the Alternative Reference Rates Committee (ARRC) convened by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York identified SOFR, a broad U.S. treasuries repurchase financing rate to be published by the Federal Reserve Bank of New York, as the rate that, in the consensus view of the ARRC, represented best practice for use in certain new U.S. dollar derivatives and other financial contracts. SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. treasury securities and has been published by the Federal Reserve Bank of New York since April 2018. The Federal Reserve Bank of New York has also published historical indicative Secured Overnight Financing Rates going back to 2014. Investors should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR.

The composition and characteristics of SOFR are not the same as those of LIBOR and SOFR is fundamentally different from LIBOR for two key reasons. First, SOFR is a secured rate, while LIBOR is an unsecured rate. Second, SOFR is an overnight rate, while LIBOR is a forward- looking rate that represents interbank funding over different maturities (e.g., three months). As a result, there can be no assurance that SOFR (including a term SOFR or compounded SOFR) will perform in the same way as LIBOR would have at any time, including, without limitation, as a result of changes in interest and yield rates in the market, market volatility or global or regional economic, financial, political, regulatory, judicial or other events.

Because SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, we have no control over its determination, calculation or publication. The Federal Reserve Bank of New York notes on its publication page for SOFR that use of SOFR is subject to important limitations and disclaimers, including that the Federal Reserve Bank of New York may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. There can be no guarantee, particularly given its relatively recent introduction, that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the notes. If the manner in which SOFR is calculated is changed, that change may result in a reduction of the amount of interest payable on SOFR-linked floating rate notes and the trading prices of such notes. In addition, the Federal Reserve Bank of New York may withdraw, modify or amend published SOFR data in its sole discretion and without notice. The interest rate for any day will not be adjusted for any modifications or amendments to SOFR data that the Federal Reserve Bank of New York may publish after the interest rate for that day has been determined.

Additionally, daily changes in SOFR have, on occasion, been more volatile than daily changes in other benchmark or market rates. Although occasional, increased daily volatility in SOFR would not necessarily lead to more volatile interest payments, the return on and value of SOFR-linked floating rate notes may fluctuate more than floating rate securities that are linked to less volatile rates. In addition, the volatility of SOFR has reflected the underlying volatility of the overnight U.S. Treasury repo market. The Federal Reserve Bank of New York has at times conducted operations in the overnight U.S. Treasury repo market in order to help maintain the federal funds rate within a target range. There can be no assurance that the Federal Reserve Bank of New York will continue to conduct such operations in the future, and the duration and extent of any such operations is inherently uncertain. The effect of any such operations, or of the cessation of such operations to the extent they are commenced, is uncertain and could be materially adverse to investors in SOFR-linked floating rate notes.

Since SOFR is a relatively new reference rate, SOFR-linked floating rate notes may not have an established trading market, and an established trading market may never develop or may not be very liquid. Market terms for floating-rate notes linked to SOFR, such as the spread over the base rate reflected in interest rate provisions or the manner of compounding the base rate, may evolve over time, and trading prices of the relevant notes may be lower than those of later-issued SOFR-linked notes as a result. Similarly, if SOFR does not prove to be widely used in securities, the trading price of SOFR-linked notes may be lower than those of notes linked to reference rates that are more widely used. Investors in the notes may not be able to sell the notes at all or may not be able to sell the notes at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

The benchmark replacements specified in the benchmark transition provisions with respect to USD LIBOR include term SOFR, a forward-looking term rate which will be based on SOFR. Term SOFR is

currently being developed under the sponsorship of the Federal Reserve Bank of New York, and there is no assurance that the development of term SOFR will be completed. If a benchmark transition event and its related benchmark replacement date (each as defined under "Effect of Benchmark Transition Event on USD LIBOR Notes") occur with respect to USD LIBOR and, at that time, a form of term SOFR has not been selected or recommended by the relevant governmental body, then the next-available benchmark replacement under the benchmark transition provisions will be used to determine the interest payable on the notes for the next applicable interest period and all subsequent interest periods (unless a benchmark transition event and its related benchmark replacement date occur with respect to that next-available benchmark replacement). Under the benchmark transition provisions with respect to USD LIBOR, the first alternative after term SOFR is Compounded SOFR, which is intended to be a compounded average of daily SOFR over the interest period.

#### **Risk Factors Associated with Foreign Exchange Rates**

#### An Investment in a Foreign Currency Note Involves Currency-Related Risks

Investment in a note whose principal and/or interest is payable in a currency other than your own principal currency, which other currency we refer to as a "foreign currency", or a note for which the amounts you receive may be determined in whole or in part by reference to a foreign currency or property denominated in or otherwise linked to a foreign currency may entail significant risks that may not be associated with a similar investment in a note payable solely in your own principal currency These risks include the possibility of significant changes in rates of exchange between your currency and the various foreign currencies or composite currencies and the possibility of the imposition or modification of foreign exchange controls or other conditions by foreign governments. These risks generally depend on factors over which we have no control, such as financial, economic, military and political events and the supply of and demand for the relevant currencies in the global markets. Notes of this kind may not be an appropriate investment for investors who are unsophisticated with respect to foreign currency transactions. For example, if the foreign currency in which your note is payable depreciates against your own currency, the equivalent in your own currency of the amount you receive at maturity may be less than your own currency equivalent of the amount you invested. Furthermore, currency fluctuations during the life of your note may adversely affect the equivalent in your own currency of the value of your note. Interest rates in respect of securities denominated in foreign currencies may fluctuate differently from the way in which interest rates in respect of securities in your own currency fluctuate which may adversely affect the market price of your note. Ultimately, the return on your foreign currency note determined by reference to your own currency may be significantly less than the return had you made your original investment in a security denominated in your own currency.

#### Changes in Foreign Currency Exchange Rates Can Be Volatile and Unpredictable

Rates of exchange between currencies have been highly volatile, and this volatility may continue and perhaps spread to other currencies in the future. Fluctuations in currency exchange rates could adversely affect an investment in a note denominated in, or whose value is otherwise linked to, a foreign currency. Depreciation of the specified currency against your own principal currency could result in a decrease in the market value of your note, including the principal payable at maturity. That in turn could cause the market value of your note to fall. Depreciation of the foreign currency against your own principal currency could result in a decline in the market value of your note.

## Government Policy Can Adversely Affect Foreign Currency Exchange Rates and an Investment in a Foreign Currency Note

Foreign currency exchange rates can either float or be fixed by sovereign governments. From time to time, governments use a variety of techniques, such as intervention by a country's central bank or imposition of regulatory controls or taxes, to affect the exchange rate of their currencies. Governments may also issue a new currency to replace an existing currency or alter the exchange rate or exchange characteristics by devaluation or revaluation of a currency. Thus, a special risk in purchasing foreign currency notes may be that their yields or payouts could be significantly and unpredictably affected by

governmental actions. Even in the absence of governmental action directly affecting foreign currency exchange rates, political, military or economic developments in the country issuing the specified foreign currency for a note or elsewhere could lead to significant and sudden changes in the foreign currency exchange rate between the foreign currency and your principal currency. These changes could affect your principal currency equivalent value of the note as participants in the global currency markets move to buy or sell the foreign currency or your own principal currency in reaction to these developments.

Governments have imposed from time to time and may in the future impose exchange controls or other conditions, including taxes, with respect to the exchange or transfer of a specified currency that could affect exchange rates as well as the availability of a specified currency for a note at its maturity or on any other payment date. In addition, the ability of a holder to move currency freely out of the country in which payment in the currency is received or to convert the currency at a freely determined market rate could be limited by governmental actions.

#### We May Not Adjust Any Notes to Compensate for Changes in Foreign Currency Exchange Rates

Except as described below, we will not make any adjustment or change in the terms of any note in the event of any change in exchange rates for the relevant currency, whether in the event of any devaluation, revaluation or imposition of exchange or other regulatory controls or taxes or in the event of other developments affecting that currency or any other currency. Consequently, investors in notes will bear the risk that their investment may be adversely affected by these types of events.

# The Manipulation of Published Currency Exchange Rates and Possible Reforms Affecting the Determination or Publication of Exchange Rates or the Supervision of Currency Trading Could Have An Adverse Impact On Your Notes

Regulators in various countries are in the process of investigating the potential manipulation of published currency exchange rates. If such manipulation has occurred or is continuing, certain published exchange rates may have been, or may be in the future, artificially lower (or higher) than they would otherwise have been. Any such manipulation could have an adverse impact on any payments on, and the value of, your notes and the trading market for your notes. In addition, we cannot predict whether any changes or reforms affecting the determination or publication of exchange rates or the supervision of currency trading will be implemented in connection with these investigations. Any such changes or reforms could also adversely impact your notes.

### Non-U.S. Dollar Notes Will Permit Us to Make Payments in U.S. Dollars or Delay Payment If We Are Unable to Obtain the Specified Currency

Notes payable in a currency other than U.S. dollars will provide that, if the other currency (or its successor) is not available to us at or about the time when a payment on the notes comes due because of circumstances beyond our control, we will be entitled to make the payment in U.S. dollars or delay making the payment. These circumstances could include the imposition of exchange controls or our inability to obtain the other currency because of a disruption in the currency markets. As a result, the value of the payment in U.S. dollars an investor would receive on the payment date may be less than the value of the payment the investor would have received in the other currency if it had been available, or may be zero. These matters are discussed under "General Note Conditions — Features Common to All Notes — Currency of Notes" and " General Note Conditions — Payment Mechanics for Notes" below. In addition, the unavailability of the specified non-U.S. currency will expose you to currency risks with respect to the U.S. dollar which would not have existed had the specified non-U.S. currency been available.

### In a Lawsuit for Payment on a Non-U.S. Dollar Note, an Investor May Bear Foreign Currency Exchange Risk

The notes will be governed by New York law. Under Section 27 of the New York Judiciary Law, a state court in the State of New York rendering a judgment on a note denominated in a foreign currency other

than U.S. dollars would be required to render the judgment in the specified currency; however, the judgment would be converted into U.S. dollars at the exchange rate prevailing on the date of entry of the judgment. Consequently, in a lawsuit for payment on a note denominated in a currency other than U.S. dollars, investors would bear currency exchange risk until judgment is entered, which could be a long time. You will therefore be exposed to currency risk with respect to both the U.S. dollar and, if applicable, the foreign currency.

In courts outside of New York, investors may not be able to obtain judgment in a specified currency other than U.S. dollars. For example, a judgment for money in an action based on a non-U.S. dollar note in many other U.S. federal or state courts ordinarily would be enforced in the United States only in U.S. dollars. The date used to determine the rate of conversion of the currency in which any particular note is denominated into U.S. dollars will depend upon various factors, including which court renders the judgment.

#### Information About Foreign Currency Exchange Rates May Not be Indicative of Future Performance

If we issue a note denominated in a specified currency other than U.S. dollars, we may include in the applicable final terms a currency supplement that provides information about historical exchange rates for that currency in relation to the U.S. dollar. Any information about exchange rates that we may provide will be furnished as a matter of information only, and you should not regard the information as indicative of the range of, or trends in, fluctuations in foreign currency exchange rates that may occur in the future. That rate will likely differ from the exchange rate used under the terms that apply to a particular note. In addition, the historical relationship between the U.S. dollar and the specified non-U.S. currency may not be an accurate proxy for the historical relationship between your own principal currency and that currency.

#### Determinations Made By the Exchange Rate Agent Are Made At Its Sole Discretion

All determinations made by the exchange rate agent shall be at its sole discretion (except to the extent it is expressly provided in this Base Prospectus that any determination is subject to approval by us) and, in the absence of manifest error, shall be conclusive for all purposes and will bind all holders of the notes and us. The exchange rate agent will not have any liability for its determinations.

#### **Risk Factors Associated with Taxation**

### We Cannot Advise You of All of the Non-U.S. Tax Consequences of Owning or Trading Any Notes We May Issue

The tax consequences of investing in the notes may, in any jurisdiction where you are subject to tax, vary significantly and adversely from the type of taxation described in the summary of the principal U.S. federal income and estate tax consequences of notes to a U.S. alien holder in this Prospectus under "Taxation — United States Taxation" below. You may face significant tax rates on interest, different tax treatment when you transfer your securities, more burdensome reporting obligations and wealth or similar taxes. These tax consequences and others could be material and adverse and therefore you should consult your own legal and tax advisors with respect to the tax characterization in your taxing jurisdiction(s) of an investment in the notes.

## Unless Otherwise Specified in the Applicable Final Terms, We Will Not Compensate Holders If We Have to Deduct Taxes from Payments on Any Notes We May Issue

With certain exceptions, as of the date of this Base Prospectus, payments on any notes we may issue are not subject to U.S. federal withholding or other tax provided that the holder is a U.S. alien holder. Withholding from payments on a note may be required if a holder fails to provide a completed Internal Revenue Service Form W-8BEN or W-8BEN-E. See the section entitled "Taxation — United States Taxation" below for more information.

Unless otherwise specified in the applicable final terms, we will not gross up any payments due on the notes and we will not compensate holders for any amount that may be withheld or due because of any withholding tax. Accordingly, during the term of the note, whether or not due to a change in law, if any withholding or other tax, assessment or other governmental charge is imposed on payments on the note by the United States or any other jurisdiction or any political subdivision or taxing authority thereof or therein (including any payment upon redemption, repurchase or stated maturity of a note), and we are required to deduct that tax, charge or assessment from any payment we make on the note (including any payment upon redemption, repurchase or stated maturity of a note), we will make that payment only after making such deduction and will not pay holders any additional amounts to compensate them for the deduction.

Consequently, if you purchase a note in these circumstances and a deduction is required to be made, you will receive less than what you would otherwise have been entitled to receive as payment on your note on the stated maturity date. We cannot predict whether any such changes in law will occur during the term of any notes we may issue and, if they do occur, the amounts that may have to be deducted.

#### Foreign Account Tax Compliance Act (FATCA) Withholding May Apply to Payments on Your Notes, Including as a Result of the Failure of the Bank or Broker Through Which You Hold the Notes to Provide Information to Tax Authorities

Your notes could be subject to a U.S. withholding tax of 30% under a law (commonly known as "FATCA") that was enacted in 2010. This tax could apply if you or any non-U.S. person or entity that receives a payment (directly or indirectly) on your behalf (including a bank, custodian, broker or other payee, at any point in the series of payments made on your notes) does not comply with the U.S. information reporting, withholding, identification, certification, and related requirements imposed by FATCA. The payments potentially subject to this withholding tax include interest (including original issue discount) on the notes.

You should consult your own tax advisors regarding the relevant U.S. law and other official guidance on FATCA. You could be affected by this withholding if, for example, your bank or broker through which you hold the notes is subject to withholding because it fails to comply with these requirements. This might be the case even if you would not otherwise have been directly subject to withholding. Accordingly, you should consult your bank or broker about the likelihood that payments to it (for credit to you) will become subject to withholding in the payment chain.

We will not pay any additional amounts in respect of this withholding tax, so if this withholding applies, you will receive less than the amount that you would have otherwise received with respect to your notes. Depending on your circumstances, you may be entitled to a refund or credit in respect of some or all of this withholding. However, even if you are entitled to have any such withholding refunded, the required procedures could be cumbersome and significantly delay your receipt of any withheld amounts. For more information, see "Taxation — United States Taxation — Foreign Account Tax Compliance Withholding (FATCA)".

In addition, your notes may also be subject to other U.S. withholding tax as described in "Taxation — United States Taxation".

### *If We Redeem Your Notes or There Is an Adjustment upon a Change in Law, You May Receive Less than Your Initial Investment*

If the calculation agent determines that performance under the notes and/or any related hedge positions has become unlawful or impractical in whole or in part for any reason or will result in materially increased costs to us or The Goldman Sachs Group, Inc. and/or any of our or its affiliates and your final terms specify "Redemption Upon Change in Law" to be applicable we may cancel such notes and, if permitted by applicable law, upon cancellation will pay the holder of such notes an amount equal to the non-scheduled early repayment amount of such notes, as determined by the calculation agent as described under "General Note Conditions – Redemption and Repayment – Non-Scheduled Early Repayment

Amount". We may also take such action if the calculation agent determines that the performance by The Goldman Sachs Group, Inc. or one of our or its affiliates under the notes and/or any related hedge positions (assuming such affiliate had been the issuer of the notes or party to any such hedging arrangement) would be unlawful or impractical or if, as a result of certain changes in the laws or regulations of any U.S. taxing authority, at any time on or after the settlement date or such other date as specified in the applicable final terms, we are obligated to pay, on the next succeeding interest payment date or maturity date, additional amounts, as described under "General Note Conditions — Redemption and Repayment — Payment of Additional Amounts" below, and that obligation cannot be avoided by the use of reasonable measures available to us.

The non-scheduled repayment amount may be less than the price at which you purchased you notes, the face amount of your notes or the market price you would have received for your notes if the change in law had not occurred and you sold your notes in the market on the non-scheduled early redemption date. Furthermore, you may not be able to reinvest the redemption proceeds at any effective interest rate as high as the interest rate or yield on the notes being redeemed. You should consider reinvestment risk in light of other investments available at that time. For more information, see "General Note Conditions – Redemption and Repayment – Redemption Upon Change in Law".

If "Fair Market Value" is specified in your final terms as the "Non-Scheduled Early Repayment Amount", the calculation agent will have significant discretion in determining the non-scheduled early repayment amount. The calculation agent may take into account such factors as it considers to be appropriate including, without limitation internal pricing models of The Goldman Sachs Group, Inc. and its affiliates. Furthermore, the calculation agent may, in its reasonable discretion, adjust the amount payable to account for any reasonable expenses and costs of (or benefit to) the Issuer or The Goldman Sachs Group, Inc. and/or any of the Issuer's or The Goldman Sachs Group, Inc.'s affiliates relating to the early redemption of the notes, including those relating to the unwinding of any underlying and/or related hedging arrangements and the hypothetical cost or benefit of replacing the amount of the funding provided by the notes at a reasonably equivalent maturity and ranking.

Unless stated otherwise in the applicable final terms, the calculation agent in respect of the notes is Goldman Sachs International, which may be presented with a conflict of interest of the kind described below under "– Considerations Relating to the Role of The Goldman Sachs Group, Inc. and its Affiliates – As Calculation Agent, Goldman Sachs International Will Have the Authority to Make Determinations That Could Affect the Market Price of Floating Rate Notes and Indexed Notes, When the Note Matures and the Amount Payable at Maturity" in connection with the determination of the non-scheduled early repayment amount.

In addition, the calculation agent may make an adjustment to the terms if a change in law has occurred as described under "General Note Conditions – Features Common to All Notes – Change in Law". The adjustments may result in the amount payable at maturity being reduced to or being valued at an amount less than your initial investment.

#### Risk Factors Related to Conflicts of Interest Between Goldman Sachs and Purchasers of Notes

### Distributors or Other Entities Involved in the Offer or Listing of the Notes May Have Potential Conflicts of Interest

Potential conflicts of interest may arise in connection with the distribution of the notes, as any distributors or other entities involved in the offer and/or the listing of the notes, as indicated in the applicable final terms, will act pursuant to a mandate granted by the Issuer and can receive commissions and/or fees on the basis of the services performed in relation to such offer and/or listing.

#### As Calculation Agent, Goldman Sachs International Will Have the Authority to Make Determinations That Could Affect the Market Price of Floating Rate Notes and Indexed Notes, When the Note Matures and the Amount Payable at Maturity

As calculation agent, Goldman Sachs International will have discretion in making various determinations that affect the market price of floating rate and indexed notes, including all determinations regarding the relevant underlyer or underlyers (including, with respect to indices, adjustments, rebasing and substitution, among other factors, any successor indices and index reference prices), market disruption events, exchange business days, observation dates, any other factors or events relevant to the calculation of amounts dependent on the performance of the underlyer or underlyers, business days, if applicable, interest amounts and interest payment dates, and the stated maturity, which could adversely affect the market price for the note and may present Goldman Sachs International with a conflict of interest of the kind described above under "- The Business Activities of the Goldman Sachs Group May Create Conflicts of Interest Between You and Us". Furthermore if, with respect to any note linked to SOFR or to the U.S. dollar LIBOR base rate (a "USD LIBOR note"), Goldman Sachs International determines on or prior to the relevant interest determination date that a benchmark transition event and its related benchmark replacement date (each as defined under "General Note Conditions - Interest Rates — Floating Rate Notes") have occurred with respect to SOFR or the U.S. dollar LIBOR base rate ("USD LIBOR"), as applicable, then the benchmark transition provisions will thereafter apply to all determinations of the interest payable on SOFR notes or USD LIBOR notes, as applicable. In accordance with the benchmark transition provisions, after a benchmark transition event and its related benchmark replacement date have occurred, the interest that will be payable for each interest period on SOFR notes or USD LIBOR notes, as applicable, will be determined by reference to the benchmark replacement (as defined under "General Note Conditions - Interest Rates - Floating Rate Notes") and any applicable spread.

If Goldman Sachs International as calculation agent has determined that a benchmark transition event and its related benchmark replacement date have occurred with respect to SOFR or USD LIBOR, as applicable, Goldman Sachs International in its sole discretion may determine the benchmark replacement conforming changes (as defined under General Note Conditions — Interest Rates — Floating Rate Notes") in a manner that is consistent with industry- accepted practices for such benchmark replacement. If Goldman Sachs International as calculation agent has determined that an original primary rate event and its related adjustment date have occurred with respect to EURIBOR, the Euro Interest Swap Rate, non-USD LIBOR or the CMS Rate, then Goldman Sachs International may adjust the terms and conditions of the notes (without your consent) to account for such event or the Issuer may redeem the notes early. Any adjustment made to the terms and conditions of the notes may have a negative effect on the value of and return on the notes. The exercise of discretion by Goldman Sachs International or the Issuer could adversely affect the return on, value of and market for your notes and may present the Issuer and/or Goldman Sachs International with a conflict of interest. We may change the calculation agent at any time without notice.

#### Trading and Other Transactions by Us in Instruments Linked to an Underlyer or the Components of an Underlyer May Impair the Market Price of an Indexed Note

We, through Goldman Sachs International or one or more of our other affiliates, expect to hedge our obligations under an indexed note by purchasing some or all of the following: index securities (in the case of an indexed note linked to an equity or debt index), and options or futures on any of the underlyers or underlyer components or other instruments linked to any of the underlyers or underlyer components. We also expect to adjust any such hedges by, among other things, purchasing or selling any of the foregoing, at any time and from time to time and to unwind such hedges by purchasing or selling any of the foregoing at any time. We may also enter into, adjust and unwind hedging transactions relating to other index-linked notes whose returns are linked to one or more underlyers. Any of these hedging activities may affect the level of any of the underlyers — directly or indirectly by affecting the price of the underlyer components — and, therefore, may adversely affect the market price of the relevant notes. It is possible that we, through our affiliates, could receive substantial returns with respect to our hedging activities while the market price of the relevant notes may decline. You should read the discussion of use of proceeds in the applicable final

terms for more information on the securities transactions in which we or one or more of our affiliates may engage.

Goldman Sachs International and our other affiliates may also engage in trading in one or more of the underlyer components or instruments linked to any of the underlyers or underlyer components included in an indexed note for their proprietary accounts, for other accounts under their management or to facilitate transactions, including, in the case of notes linked to an equity index, block transactions, on behalf of customers. Any of these activities of Goldman Sachs International or our other affiliates could affect the level of any of the underlyers — directly or indirectly by affecting the price of any underlyer components — and, therefore, could adversely affect the market price of the relevant notes. We may also issue, and Goldman Sachs International and our other affiliates may also issue or underwrite, other securities or financial or derivative instruments with returns linked to changes in the level of any of the underlyers or underlyer components. By introducing competing products into the marketplace in this manner, we and our affiliates could adversely affect the market price of the relevant notes.

The fiscal agency agreement governing notes we may issue under this Base Prospectus does not, with respect to indexed notes, impose any restriction on our ability or the ability of any of our affiliates to purchase or sell all or any portion of the underlyer components or instruments linked to those components or the underlyers.

### The Business Activities of the Goldman Sachs Group May Create Conflicts of Interest Between You and Us

As noted above, Goldman Sachs International and our other affiliates expect to engage in trading activities related to one or more of the underlyers included in indexed notes (and the relevant index components, in the case of an underlyer that is an index) that are not for your account or on your behalf. These trading activities may present a conflict between your interest in an indexed note and the interests Goldman Sachs International or our other affiliates have in their proprietary accounts and in facilitating transactions, including, in the case of notes linked to an equity index, block trades, for their customers and in accounts under their management. These trading activities, if they influence the level of the relevant underlyer, could be adverse to your interests as a beneficial owner of an indexed note.

Goldman Sachs International and our other affiliates may, at present or in the future, engage in business with the issuers of the index securities contained in an equity or debt index included in an indexed note, including by making loans to or equity investments in those companies or providing advisory services to them. These services could include merger and acquisition advisory services. Any such activities may present a conflict between the obligations of Goldman Sachs International or another of our affiliates and your interests as a beneficial owner of an indexed note. Moreover, one or more of our affiliates may have published or in the future expect to publish research reports with respect to one or more of the issuers of the index securities contained in an equity or debt index included in an indexed note included in an indexed note. Any of these activities by any of our affiliates may affect the level of any of the indices and, therefore, the market price of the relevant notes.

#### Risk Factors Related to Regulatory Resolution Strategies and Long-Term Debt Requirements

## The Application of Regulatory Resolution Strategies Could Create Greater Risk of Loss for Holders of our Debt Securities in the Event of the Resolution of The Goldman Sachs Group, Inc.

Your ability to recover from The Goldman Sachs Group, Inc. the full amount that would otherwise be payable under its guarantee of our securities in a proceeding under the U.S. Bankruptcy Code may be impaired by the exercise by the FDIC of its powers under the "orderly liquidation authority" under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"). In addition, the single point of entry strategy described below is intended to impose losses at the top-tier holding company level in the resolution of a global systemically important bank ("G-SIB") such as The Goldman Sachs Group, Inc. Title II of the Dodd-Frank Act created a new resolution regime known as the "orderly liquidation authority" to which financial companies, including bank holding companies such as The Goldman Sachs Group, Inc., can be subjected. Under the orderly liquidation authority, the FDIC may be appointed as receiver for a financial company for purposes of liquidating the entity if, upon the recommendation of applicable regulators, the Secretary of the Treasury determines, among other things, that the entity is in severe financial distress, that the entity's failure would have serious adverse effects on the U.S. financial system and that resolution under the orderly liquidation authority would avoid or mitigate those effects. Absent such determinations, The Goldman Sachs Group, Inc., as a U.S. bank holding company, would remain subject to the U.S. Bankruptcy Code.

If the FDIC is appointed as receiver under the orderly liquidation authority, then the orderly liquidation authority, rather than the U.S. Bankruptcy Code, would determine the powers of the receiver and the rights and obligations of creditors and other parties who have transacted with The Goldman Sachs Group, Inc. There are substantial differences between the rights available to creditors in the orderly liquidation authority and in the U.S. Bankruptcy Code, including the right of the FDIC under the orderly liquidation authority to disregard the strict priority of creditor claims in some circumstances (which would otherwise be respected by a bankruptcy court) and the use of an administrative claims procedure to determine creditors' claims (as opposed to the judicial procedure utilized in bankruptcy proceedings). In certain circumstances under the orderly liquidation authority, the FDIC could elevate the priority of claims that it determines necessary to facilitate a smooth and orderly liquidation without the need to obtain creditors' consent or prior court review. In addition, the FDIC has the right to transfer claims to a third party or "bridge" entity under the orderly liquidation authority.

The FDIC has announced that a single point of entry strategy may be a desirable strategy to resolve a large financial institution such as The Goldman Sachs Group, Inc. in a manner that would, among other things, impose losses on shareholders, debt holders (including, in our case, holders of our securities which are guaranteed by The Goldman Sachs Group, Inc.) and other creditors of the top-tier holding company (in our case, The Goldman Sachs Group, Inc.), while permitting the holding company's subsidiaries to continue to operate. In addition, the Board of Governors of the Federal Reserve System (the "Federal Reserve Board") has adopted requirements that U.S. G-SIBs, including The Goldman Sachs Group, Inc., maintain minimum amounts of long-term debt and total loss-absorbing capacity to facilitate the application of the single point of entry resolution strategy. It is possible that the application of the single point of entry strategy under the orderly liquidation authority-in which The Goldman Sachs Group, Inc. would be the only entity to enter resolution proceedings-would result in greater losses to holders of our securities, which are guaranteed by The Goldman Sachs Group, Inc. (including holders of our fixed rate, floating rate and indexed debt securities), than the losses that would result from the application of a bankruptcy proceeding or a different resolution strategy, such as a multiple point of entry resolution strategy for The Goldman Sachs Group, Inc. and certain of its material subsidiaries. Assuming The Goldman Sachs Group, Inc. entered resolution proceedings and that support from The Goldman Sachs Group, Inc. or other available resources to its subsidiaries (other than us) was sufficient to enable those subsidiaries to remain solvent, losses at the subsidiary level (other than us) would be transferred to The Goldman Sachs Group, Inc. and ultimately borne by The Goldman Sachs Group, Inc.'s security holders, third-party creditors of The Goldman Sachs Group, Inc.'s subsidiaries (other than us) would receive full recoveries on their claims, and The Goldman Sachs Group, Inc.'s creditors (including holders of our debt securities, which are guaranteed by The Goldman Sachs Group, Inc.) could face significant and possibly complete losses. In that case, The Goldman Sachs Group, Inc.'s creditors would face losses while the third-party creditors of The Goldman Sachs Group, Inc.'s subsidiaries (other than us) would incur no losses because the subsidiaries would continue to operate and would not enter resolution or bankruptcy proceedings. In addition, holders of The Goldman Sachs Group, Inc.'s eligible LTD (defined below) and its other creditors (including holders of our debt securities which are guaranteed by The Goldman Sachs Group, Inc.) could face losses ahead of other similarly situated creditors in a resolution under the orderly liquidation authority if the FDIC exercised its right, described above, to disregard the strict priority of creditor claims.

The orderly liquidation authority also provides the FDIC with authority to cause creditors and shareholders of the financial company such as The Goldman Sachs Group, Inc. in receivership to bear losses before taxpayers are exposed to such losses, and amounts owed to the U.S. government would

generally receive a statutory payment priority over the claims of private creditors, including senior creditors. In addition, under the orderly liquidation authority, claims of creditors (including holders of our debt securities) could be satisfied through the issuance of equity or other securities in a bridge entity to which The Goldman Sachs Group, Inc.'s assets are transferred. If such a securities-for-claims exchange were implemented, there can be no assurance that the value of the securities of the bridge entity would be sufficient to repay or satisfy all or any part of the creditor claims for which the securities were exchanged. While the FDIC has issued regulations to implement the orderly liquidation authority, not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is possible. In addition, certain jurisdictions, including the U.K. and the E.U., have implemented, or are considering, changes to resolution regimes to provide resolution authorities with the ability to recapitalize a failing entity by writing down its unsecured debt or converting its unsecured debt into equity. Such "bail-in" powers are intended to enable the recapitalization of a failing institution by allocating losses to its shareholders and unsecured debtholders. For example, the Bank of England requires a certain amount of intercompany funding that we provide to The Goldman Sachs Group. Inc.'s material U.K. subsidiaries to contain a contractual trigger to expressly permit the Bank of England to exercise such "bail-in" powers in certain circumstances. If the intercompany funding The Goldman Sachs Group, Inc. provides to our subsidiaries is "bailed in," The Goldman Sachs Group. Inc.'s claims on its subsidiaries would be subordinated to the claims of the subsidiaries' third-party creditors or written down. U.S. regulators are considering and non-U.S. authorities have adopted requirements that certain subsidiaries of large financial institutions maintain minimum amounts of total lossabsorbing capacity that would pass losses up from the subsidiaries to the top-tier BHC and, ultimately, to security holders of the top-tier holding company in the event of failure.

### The Application of The Goldman Sachs Group, Inc.'s Proposed Resolution Strategy Could Result in Greater Losses for The Goldman Sachs Group, Inc.'s Security Holders.

As required by the Dodd-Frank Act and regulations issued by the Federal Reserve Board and the FDIC, The Goldman Sachs Group, Inc. is required to provide to the Federal Reserve Board and the FDIC a plan for our rapid and orderly resolution in the event of material financial distress affecting the firm or the failure of The Goldman Sachs Group, Inc. In its resolution plan, The Goldman Sachs Group, Inc. would be resolved under the U.S. Bankruptcy Code. The strategy described in The Goldman Sachs Group, Inc. 's resolution plan is a variant of the single point of entry strategy; The Goldman Sachs Group, Inc. and Goldman Sachs Funding LLC ("Funding IHC"), a wholly-owned, direct subsidiary of The Goldman Sachs Group, Inc., would recapitalize and provide liquidity to certain major subsidiaries (which does not include us), including through the forgiveness of intercompany loans, the extension of the maturities of intercompany indebtedness and the extension of additional intercompany loans. If this strategy were successful, creditors of some or all of The Goldman Sachs Group, Inc.'s major subsidiaries (which does not include us) would receive full recoveries on their claims, while The Goldman Sachs Group, Inc.'s security holders could face significant and possibly complete losses.

To facilitate the execution of its resolution plan, The Goldman Sachs Group, Inc. formed Funding IHC. In exchange for an unsecured subordinated funding note and equity interest, The Goldman Sachs Group, Inc. transferred certain intercompany receivables and substantially all of its global core liquid assets ("GCLA") to Funding IHC, and agreed to transfer additional GCLA above prescribed thresholds.

The Goldman Sachs Group, Inc. also put in place a Capital and Liquidity Support Agreement ("CLSA") among The Goldman Sachs Group, Inc., Funding IHC and its major subsidiaries (which does not include us). Under the CLSA, Funding IHC has provided The Goldman Sachs Group, Inc. with a committed line of credit that allows The Goldman Sachs Group, Inc. to draw sufficient funds to meet its cash needs during the ordinary course of business. In addition, if The Goldman Sachs Group, Inc.'s financial resources deteriorate so severely that resolution may be imminent, (i) the committed line of credit will automatically terminate and the unsecured subordinated funding note will automatically be forgiven, (ii) all intercompany receivables owed by the major subsidiaries (which does not include us) to The Goldman Sachs Group, Inc. will be transferred to Funding IHC or their maturities will be extended to five years, (iii) The Goldman Sachs Group, Inc. will be obligated to transfer substantially all of its remaining intercompany receivables and GCLA (other than an amount to fund anticipated bankruptcy expenses) to Funding IHC and (iv) Funding IHC will be obligated to provide capital and liquidity support to the major subsidiaries (which does not include us).

The Goldman Sachs Group, Inc.'s and Funding IHC's obligations under the CLSA are secured pursuant to a related security agreement. Such actions would materially and adversely affect The Goldman Sachs Group, Inc.'s liquidity. As a result, during a period of severe stress, The Goldman Sachs Group, Inc. might commence bankruptcy proceedings at an earlier time than it otherwise would if the CLSA and related security agreement had not been implemented.

If The Goldman Sachs Group, Inc.'s proposed resolution strategy were successful, holders of our debt securities, which are guaranteed by The Goldman Sachs Group, Inc. could face significant losses. In that case, holders of our debt securities could face losses while the third-party creditors of The Goldman Sachs Group, Inc.'s major subsidiaries (which does not include us) would incur no losses because those subsidiaries would continue to operate and not enter resolution or bankruptcy proceedings. As part of the strategy, The Goldman Sachs Group, Inc. could also seek to elevate the priority of its guarantee obligations relating to its major subsidiaries' (which does not include us) derivatives contracts or transfer them to another entity so that cross-default and early termination rights would be stayed under the International Swaps and Derivatives Association Universal Resolution Stay Protocol or International Swaps and Derivatives Association 2018 U.S. Resolution Stay Protocol, as applicable, which would result in The Goldman Sachs Group, Inc.'s other creditors (including holders of our debt securities, which are guaranteed by The Goldman Sachs Group, Inc.) incurring losses ahead of the beneficiaries of those guarantee obligations. It also possible that The Goldman Sachs Group, Inc.'s other creditors (including holders of our debt securities, which are guaranteed by The Goldman Sachs Group, Inc.) could incur losses ahead of other similarly situated creditors. If The Goldman Sachs Group Inc.'s preferred resolution strategy were not successful, The Goldman Sachs Group, Inc.'s financial condition would be adversely impacted and holders of our debt securities, which are guaranteed by The Goldman Sachs Group, Inc., may as a consequence be in a worse position than if the strategy had not been implemented. In all cases, any payments to holders of our debt securities are dependent on our ability to make such payments out of funds provided by The Goldman Sachs Group, Inc. and The Goldman Sachs Group, Inc.'s ability to make payments on its guarantee and are therefore subject to The Goldman Sachs Group, Inc.'s credit risk.

# The Notes Will Provide Only Limited Acceleration and Enforcement Rights.

TLAC Rules disqualify from eligible LTD, among other instruments, senior debt securities issued on or after December 31, 2016 that permit acceleration for reasons other than insolvency or payment default. As a result of the TLAC Rules, we have modified the terms of the notes to reflect changes to the events of default and therefore the only events of default will be payment defaults that continue for a 30day grace period and insolvency events as specified herein. Any other default under or breach of the notes will not give rise to an event of default, whether after notice, the passage of time or otherwise. As a consequence, if any such other default or breach occurs, holders of the notes will not be entitled to accelerate the maturity of any notes – that is, they will not be entitled to declare the principal of any notes to be immediately due and payable because of such other default or breach. These other defaults and breaches would include any breach of the covenant described below under "General Note Conditions— Mergers and Similar Transactions".

The limitations on events of default, acceleration rights and other remedies described in the prior paragraph do not apply with regard to all senior debt securities issued by The Goldman Sachs Group, Inc., particularly certain securities issued prior to January 1, 2017. Therefore, if certain defaults or breaches occur, holders of such other debt securities may be able to accelerate their securities so that such securities become immediately due and payable while you may not be able to do so. In such an event, our obligation to repay the accelerated securities in full could adversely affect our ability to make timely payments on your notes thereafter. These limitations on your rights and remedies could adversely affect the market value of your securities, especially during times of financial stress for us or our industry.

Please see "General Note Conditions — Events of Default and Remedies" below for an explanation of the term "event of default" and for information regarding acceleration rights and remedies.

#### DOCUMENTS INCORPORATED BY REFERENCE

The Goldman Sachs Group, Inc. files documents and information with the United States Securities and Exchange Commission, which we refer to as the "SEC". The following documents, of which items 1 to 4 The Goldman Sachs Group, Inc. has filed with the SEC, are hereby incorporated by reference into this Base Prospectus:

- the Annual Report on Form 10-K for the fiscal year ended December 31, 2020, dated February 19, 2021 (the "2020 Form 10-K"), including Exhibit 21.1 thereto ("Exhibit 21.1"), which The Goldman Sachs Group, Inc. filed with the SEC on February 22, 2021 (accessible on <u>https://www.goldmansachs.com/investor-relations/redirects/2020-10-</u> <u>k.html</u>);
- (2) the Proxy Statement relating to our 2021 Annual Meeting of Shareholders on April 29, 2021 (the "2021 Proxy Statement"), which The Goldman Sachs Group, Inc. filed with the SEC on March 19, 2021 (accessible on: <u>https://www.goldmansachs.com/investor-relations/financials/current/proxy-statements/2021-proxy-statement-pdf.pdf</u>);
- (3) the Current Report on Form 8-K dated April 14, 2021, including Exhibit 99.1 ("Exhibit 99.1 to the April 14 Form 8-K") thereto, which The Goldman Sachs Group, Inc. filed with the SEC on April 14, 2021 (accessible on <u>https://www.goldmansachs.com/investor-relations/financials/8k/2021/8k-04-14-21.pdf</u>); and
- (4) the Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2021, dated May 3, 2021 (the "2021 First Quarter Form 10-Q"), which The Goldman Sachs Group, Inc. filed with the SEC on May 4, 2021 (accessible on <u>https://www.goldmansachs.com/investor-021/first-quarter-2021-10-q.pdf</u>).
- (5) the Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2021, dated August 3, 2021 (the "2021 Second Quarter Form 10-Q"), which The Goldman Sachs Group, Inc. filed with the SEC on August 4, 2021 (accessible on <u>https://www.goldmansachs.com/investor-021/first-quarter-2021-10-q.pdf</u>).

The Goldman Sachs Group, Inc. will provide without charge to each person to whom this Base Prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been incorporated by reference into this Base Prospectus. Unless otherwise indicated, any exhibits to such documents are not incorporated by reference into, and do not form part of, this Base Prospectus. The Goldman Sachs Group, Inc. has determined that any such exhibits not incorporated by reference into this Base Prospectus. You can request those documents from Investor Relations, 200 West Street, New York, NY 10282, telephone +1 (212) 902-0300. The Goldman Sachs Group, Inc.'s filings with the SEC are also available through the SEC's website at http://www.sec.gov. In addition, the Base Prospectus and any SEC filings incorporated by reference into this Base Prospectus will be filed with the UK Financial Conduct Authority, and the London Stock Exchange will publish such documents on its website at www.londonstockexchange.com.

The following table indicates where information required by the UK Prospectus Regulation Implementing Regulation to be disclosed in, and incorporated by reference into, the Base Prospectus can be found in the documents referred to above. The information incorporated by reference that is not included in the cross-reference list is either not relevant for investors or covered elsewhere in the Base Prospectus.

Information required by the UK Prospectus Regulation Implementing Regulation	Document/Location		
Information about The Goldman Sachs Group, Inc.			
Risk Factors (Annex 7, Section 3.1 of the UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (pp. 26 - 50)		

History and development of our company (Annex 7, Section 4.1 of the UK Prospectus Regulation Implementing Regulation) Business overview	2020 Form 10-K (p. 1, 53-111)	
Our principal activities (Annex 7, Section 5.1.1 of the UK Prospectus Regulation Implementing Regulation) Organizational structure (Annex 7, Section 6 of the UK	2020 Form 10-K (pp. 1-5, 7-8, 120)	
Prospectus Regulation Implementing Regulation)	2020 Form 10-K (pp. 32-33, Exhibit 21.1)	
Trend information (Annex 7, Section 7 of the UK Prospectus Regulation Implementing Regulation) Administrative, management and supervisory bodies, including	2020 Form 10-K (pp. 53-111) Exhibit 99.1 to the April 14 Form 8-K	
conflicts of interest (Annex 7, Section 9 of the UK Prospectus Regulation Implementing Regulation)	2021 Proxy Statement (pp. 7-30, 91-94) 2020 Form 10-K (pp. 23-24)	
Beneficial owners of more than five per cent. (Annex 7, Section 10 of the UK Prospectus Regulation Implementing Regulation) Financial information	2021 Proxy Statement (pp. 95-97)	
Audited historical financial information for the fiscal years ended December 31, 2020, December 31, 2019 and December 31, 2018 (Annex 7, Section 11.1-11.1.6 of the UK Prospectus	2020 Form 10-K (pp. 53-111, 112-218)	
Regulation Implementing Regulation) Audit report (Annex 7, Section 11.1 of the UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (pp. 113-115)	
Balance sheet (Annex 7, Section 11.1 of the UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (p. 117)	
Income statement (Annex 7, Section 11.1 of the UK Prospectus Regulation Implementing Regulation) Cash flow statement (Annex 7, Section 11.1 of the	2020 Form 10-K (p. 116)	
UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (p. 119)	
Accounting policies and explanatory notes (Annex 7, Section 11.1 of the UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (pp. 55-57,112-218)	
Auditing of historical financial information (Annex 7, Section 11.2 of the UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (pp. 112-212)	
Legal and arbitration proceedings (Annex 7, Section 11.3 of the UK Prospectus Regulation Implementing Regulation)	2021 Second Quarter From 10-Q (pp. 86-94) 2020 Form 10-K (pp. 52, 202-210)	
Material Contracts (Annex 7, Section 12.1 of the UK Prospectus Regulation Implementing Regulation)	2020 Form 10-K (pp. 83-84)	

No separate financial statements of GS Finance Corp. are included in this Base Prospectus. GS Finance Corp. is not required under the legislation of the United States to prepare and publish any financial statements. Furthermore, The Goldman Sachs Group, Inc. and GS Finance Corp. do not consider that such financial statements would be material to holders of the securities of GS Finance Corp. because GS

Finance Corp. has no operating history or independent operations and is not engaged in and does not propose to engage in any activity other than issuing its securities and lending the net proceeds therefrom to The Goldman Sachs Group, Inc. and/or its subsidiaries. Furthermore, The Goldman Sachs Group, Inc.'s obligations under the related guarantees provide a full and unconditional guarantee of payments of amounts due on the related securities of GS Finance Corp. In addition, The Goldman Sachs Group, Inc. does not expect GS Finance Corp. to file reports under the Exchange Act with the SEC.

#### **DESCRIPTION OF THE ISSUER**

GS Finance Corp. is a Delaware corporation and a wholly owned subsidiary of The Goldman Sachs Group, Inc., created for the primary purpose of providing Goldman Sachs with financing for its operations by issuing securities to investors and lending the net proceeds therefrom to The Goldman Sachs Group, Inc. and/or its subsidiaries. GS Finance Corp. is a finance company and is engaged in no activity other than the raising of capital in order to make it available to its parent company or to undertakings affiliated thereto. We filed our original certificate of incorporation with the Secretary of the State of the State of Delaware on August 17, 2007. Our principal administrative establishment is located at 200 West Street, New York, NY 10282, telephone +1 (212) 902-1000.

The Goldman Sachs Group, Inc. is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. Founded in 1869, it is one of the oldest and largest investment banking firms. Its headquarters are located at 200 West Street, New York, NY 10282, telephone +1 (212) 902-1000. The Goldman Sachs Group, Inc. also maintains offices in all major financial centers around the world.

Because the assets of The Goldman Sachs Group, Inc. consist primarily of interests in the subsidiaries through which The Goldman Sachs Group, Inc. 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 GS Finance Corp., as the beneficiaries of the guarantee by The Goldman Sachs Group, Inc., to benefit from the distribution, is junior to creditors of the subsidiary, except to the extent that any claims The Goldman Sachs Group, Inc. may have as a creditor of the subsidiary are recognized. Many of the subsidiaries of The Goldman Sachs Group, Inc., including its broker-dealer, bank and insurance subsidiaries are subject to laws that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to The Goldman Sachs Group, Inc. Restrictions or regulatory action of that kind could impede access to funds that The Goldman Sachs Group, Inc. needs to make payments on its obligations, including its guarantee obligations to the investors in securities of GS Finance Corp. Because some of The Goldman Sachs Group, Inc.'s subsidiaries, including from time to time some of the principal operating subsidiaries of The Goldman Sachs Group, Inc., are partnerships in which The Goldman Sachs Group, Inc. is a general partner or the sole limited partner, The Goldman Sachs Group, Inc. may be liable for their obligations. The Goldman Sachs Group, Inc. also guarantees many of the obligations of its subsidiaries other than GS Finance Corp. Any liability The Goldman Sachs Group. Inc. may have for its subsidiaries' obligations could reduce its assets that are available to satisfy its guarantee obligations to the investors in securities of GS Finance Corp.

Each of GS Finance Corp. and Goldman Sachs Group, Inc. has entered into an agreement with Goldman Sachs International, an affiliate of The Goldman Sachs Group, Inc., under which Goldman Sachs International will, and other dealers may, act as agents for the placement, or purchase for resale, of notes issued by GS Finance Corp.

# USE OF PROCEEDS

We will lend the net proceeds from sales of the securities to The Goldman Sachs Group, Inc. and/or its subsidiaries. Goldman Sachs expects to use the proceeds from such loans to provide additional funds for its operations and for other general corporate purposes, unless otherwise specified in the applicable final terms. We will receive the net proceeds only from sales of the notes made in connection with their original issuance. We do not expect to receive any proceeds from resales of the notes by Goldman Sachs International or any of our other affiliates in market-making transactions. We expect our affiliates to retain the proceeds of their market-making resales and not to pay the proceeds to us.

#### **CREDIT RATINGS**

The following table sets forth the unsecured corporate credit ratings of The Goldman Sachs Group, Inc. as of the date of this Base Prospectus:

Dominion Bond Rating Service Limited	Short-Term Debt	Long-Term Debt	Subordinated Debt	Preferred Stock
	R-1 (middle)	A (high)	A	BBB (high)
Fitch, Inc.	F1	А	BBB+	BBB-
Moody's Investors Service	P-1	A2	Baa2	Ba1
Standard & Poor's	A-2	BBB+	BBB-	BB
Rating and Investment Information, Inc.	a-1	А	A-	N/A

The specific meaning of each of the credit ratings is set out by the relevant credit ratings agency in the applicable web site, as follows: for Dominion Bond Rating Service Limited, see https://www.dbrs.com/understanding-ratings/#about-ratings; for Fitch, Inc., see https://www.fitchratings.com/site/definitions; Moody's for Investors Service, see http://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC 79004; for Standard & Poor's, see https://www.standardandpoors.com/en\_US/web/guest/article/-/view/sourceId/504352 and for Rating and Investment Information, Inc., see http://www.r-i.co.jp/eng/cfp/about/definition.html.

A rating is not a recommendation to buy, sell or hold any of our securities. Any or all of these ratings are subject to revision or withdrawal at any time by the assigning rating organization. Each rating should be evaluated independently of any other rating.

#### **GENERAL NOTE CONDITIONS**

#### Information About Our Series B Euro Medium-Term Notes Program

#### **General Description of the Program**

When we refer to "notes" in this Base Prospectus, unless otherwise indicated, we mean the Series B euro medium-term notes. The notes may be issued pursuant to this Base Prospectus and the relevant final terms prepared in connection with a particular issuance of notes. The notes will not be secured by any property or assets. The notes will not be subordinated to any of our other debt obligations. We may offer and sell these notes to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis. All Series B euro medium-term notes will be guaranteed by The Goldman Sachs Group, Inc.

#### The Notes Will Be Senior

We may issue Series B euro medium-term notes. None of the Series B euro medium-term notes will be secured by any property or assets of GS Finance Corp., The Goldman Sachs Group, Inc. or its subsidiaries. Thus, by owning a note, you are one of our unsecured creditors.

The Series B euro medium-term notes will constitute part of our senior debt and will rank equally with all of our other unsecured and unsubordinated debt. The Goldman Sachs Group, Inc. guarantee of notes will rank equally in right of payment with all senior indebtedness of The Goldman Sachs Group, Inc.

#### The Notes Will Be Issued Under a Fiscal Agency Agreement

The notes will be issued pursuant to a document called a fiscal agency agreement. The fiscal agency agreement is a contract among The Goldman Sachs Group, Inc. as guarantor, GS Finance Corp. as issuer and The Bank of New York Mellon, which acts as fiscal agent. The fiscal agent performs certain administrative duties for us. The fiscal agent does not act as an indenture trustee on your behalf.

#### We May Issue Other Series of Debt Securities

The fiscal agency agreement permits us to issue different series of notes from time to time. The Series B euro medium-term notes is a single, distinct series of notes. We may, however, issue notes in such amounts, at such times and on such terms as we wish, provided that any tranche of notes issued under this Base Prospectus will accord with the terms and conditions set out in this Base Prospectus. The notes will differ from one another, and from other series, in their terms.

When we refer to the "notes" or "these notes", unless otherwise indicated, we mean the Series B euro medium-term notes. When we refer to a "series" of notes, we mean a series, such as the Series B euro medium-term notes, issued under one of our fiscal agency agreements. When we refer to an "issue" or an "issuance" of notes, we mean an issue of notes having the same terms and conditions, including any reopenings of that issuance, and bearing as applicable the same Common Code or ISIN (or similar type of identifier).

#### Amounts That We May Issue

The fiscal agency agreement does not limit the aggregate amount of notes that we may issue nor does it limit the number of series or the aggregate amount of any particular series we may issue. Also, if we issue notes having the same terms in a particular offering, we may "reopen" that offering at any later time and offer additional notes having the same stated maturity date, interest payment dates, if any, and other terms, except for the date of issuance and issue price. See "— Form, Exchange, Registration and Transfer — Extensions for Further Issuances" below.

The fiscal agency agreement and the notes do not limit our ability to incur other indebtedness or to issue other securities. Also, we are not subject to financial or similar restrictions by the terms of the notes or the fiscal agency agreement.

#### Use of This Base Prospectus in Market-Making Transactions

Our affiliates may use this Base Prospectus to resell notes in market-making transactions from time to time, including both notes that we have issued before the date of this Base Prospectus and notes that we have not yet issued. See "Plan of Distribution" below. In this Base Prospectus, the term "this offering" means the initial offering of the notes made in connection with their original issuance. This term does not refer to any subsequent resales of notes in market-making transactions.

#### The Goldman Sachs Group, Inc. Is a Holding Company

Because the assets of The Goldman Sachs Group, Inc. consist primarily of interests in the subsidiaries through which The Goldman Sachs Group, Inc. 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 GS Finance Corp., as the beneficiaries of the guarantee by The Goldman Sachs Group, Inc., to benefit from the distribution, is junior to creditors of the subsidiary, except to the extent that any claims The Goldman Sachs Group, Inc. may have as a creditor of the subsidiary are recognized. Many of the subsidiaries of The Goldman Sachs Group, Inc., including its broker-dealer, bank and insurance subsidiaries are subject to laws that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to The Goldman Sachs Group, Inc. Restrictions or regulatory action of that kind could impede access to funds that The Goldman Sachs Group, Inc. needs to make payments on its obligations, including its guarantee obligations to the investors in securities of GS Finance Corp. Because some of The Goldman Sachs Group, Inc.'s subsidiaries, including from time to time some of the principal operating subsidiaries of The Goldman Sachs Group, Inc., are partnerships in which The Goldman Sachs Group, Inc. is a general partner or the sole limited partner, The Goldman Sachs Group, Inc. may be liable for their obligations. The Goldman Sachs Group, Inc. also guarantees many of the obligations of its subsidiaries other than GS Finance Corp. Any liability The Goldman Sachs Group, Inc. may have for its subsidiaries' obligations could reduce its assets that are available to satisfy its guarantee obligations to the investors in securities of GS Finance Corp.

# **Governing Law**

The fiscal agency agreement and the notes will be governed by New York law.

#### This Section Is Only a Summarized Discussion of the Fiscal Agency Agreement and of Certain Terms of Your Note

The fiscal agency agreement, as applicable, and related documents, including your note, contain the full legal text of the matters described in this section and your final terms. A copy of the fiscal agency agreement is available for inspection at the corporate trust office of the fiscal agent in the Borough of Manhattan, New York City and at the office of the paying agent listed at the end of this Base Prospectus.

Investors should carefully read the description of the terms and provisions of the notes and the fiscal agency agreement below. This section and your final terms summarize all the material terms of the fiscal agency agreement and your note. They do not, however, describe every aspect of the fiscal agency agreement and your note. For example, in this section entitled "General Note Conditions" and your final terms, we use terms that have been given special meaning in the fiscal agency agreement, but we describe the meaning of only the more important of those terms.

As you read this section, please remember that each tranche of notes will be the subject of final terms which complete the general terms described in this section and elsewhere in this Base Prospectus. The terms and conditions applicable to any particular tranche of notes are the general terms in this Base Prospectus that apply to your notes, as completed by the relevant final terms.

When we refer to your final terms, we mean the final terms describing the specific terms of the note you purchase. The terms we use in any final terms that we also use in this document will have the meaning we give them in this document.

#### Features Common to All Notes

#### Form of Notes

We will issue each note in registered form. If the applicable final terms state that the notes are to be issued under NSS and that they are intended to be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations, then the notes will be registered in the name of a nominee for a common safekeeper for Euroclear and Clearstream, Luxembourg and we will deliver these notes to a common safekeeper for Euroclear and Clearstream, Luxembourg. Delivering the notes to a common safekeeper does not necessarily mean that the notes will be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any time or all times during their life.

Global notes in registered form which are not issued under NSS will be deposited with, and registered in the name of a nominee of, a common depositary for Euroclear and Clearstream, Luxembourg or other clearing system as specified in the applicable final terms.

For a further discussion of global notes in registered form, see "— Form, Exchange, Registration and Transfer" below.

The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium and the address of Clearstream, Luxembourg is 42 Avenue JF Kennedy, L-1855 Luxembourg. The address of any alternative clearing system will be specified in the applicable final terms.

#### Principal Amount, Stated Maturity and Maturity

Unless otherwise stated, the principal amount of a note means the principal amount payable at its stated maturity, unless such amount is not determinable, in which case the principal amount of a note is its face amount. Any notes owned by us, The Goldman Sachs Group, Inc. or any of our other affiliates are not deemed to be outstanding.

The term "stated maturity" with respect to any note means the day on which the principal amount of that note is scheduled to become due. The principal may become due sooner, by reason of redemption or acceleration after a default or otherwise in accordance with the terms of the note or later, due to the automatic extension of the stated maturity or the extension of the stated maturity at our election or the election of the holder, in each case, in accordance with the terms of the note. The day on which the principal actually becomes due, whether at the stated maturity or otherwise, is called the "maturity" of the principal.

In connection with any tranche of notes, the price and amount of notes to be offered under the program will be determined by us and the relevant dealer at the time of offer in accordance with prevailing market conditions.

#### **Currency of Notes**

Each note will be denominated in a currency, composite currency or basket of currencies or currency unit or units that will be specified on the face of the note and in the applicable final terms. We refer to this currency, composite currency, basket of currencies or currency unit or units as a "specified currency". Some notes may have different specified currencies for principal and interest. You will have to pay for your note by delivering the requisite amount of the specified currency for the principal to Goldman Sachs International or another firm that we name in your final terms, unless other arrangements have been made between you and us or you and that firm. We will make payments on the notes in the applicable specified currency; for a further discussion of payment see "— Payment Mechanics for Notes" below. Unless otherwise specified in the applicable final terms, Goldman Sachs International will be the exchange rate agent for any note denominated in a currency that is not the U.S. dollar.

Notes denominated or payable in euros will have minimum denominations of €100,000. Notes denominated in any other currency or composite currency will have minimum denominations equal to at least €100,000 at the time of issuance.

See "Risk Factors — Considerations Relating to Notes Denominated or Payable in or Linked to Currencies Other Than Your Own Principal Currency" above for more information about the risks of investing in notes denominated in a currency different from your own principal currency.

#### Types of Notes

We may issue the following three types of notes:

- **Fixed Rate Notes.** A note of this type will bear interest at a fixed rate described in the applicable final terms. This type includes notes which bear no interest (which we refer to as "zero coupon notes") and may be instead issued at a price significantly lower than the principal amount (which we refer to as "original issue discount notes" or "discount notes") and / or pay a multiple of the face amount at maturity. See "— Interest Rates Fixed Rate Notes" below.
- Floating Rate Notes. A note of this type will bear interest at rates that are determined by reference to an interest rate formula. In some cases, the rates may also be adjusted by adding or subtracting a spread or multiplying by a spread multiplier and may be subject to a minimum rate or a maximum rate. The various interest rate formulas and these other features are described below under "— Interest Rates Floating Rate Notes". If your note is a floating rate note, the formula and any adjustments that apply to the interest rate will be specified in your final terms.
- **Indexed Notes.** A note of this type provides that either or both of the principal amount payable at its stated maturity or the amounts payable during the life of the note will be determined at least in part by reference to, directly or indirectly, one or more underlyers, including:
  - interest rate formulas and currency exchange rates, the choices for which are identified below in "— Interest Rates — Indexed Notes";
  - one or more currencies;
  - one or more indices; and/or
  - one or more baskets of the items described above;

as specified in the applicable final terms.

An indexed note will be further categorized as having one or more of the following features: "range accrual", "steepener/flattener", "Asian absolute performance", "digital", "outperformance" and "participation".

A note may have elements of each of the three types of notes listed above. In particular, a note may bear interest at a fixed rate (or rates) in the initial interest period (or periods) and at a floating rate in subsequent interest periods, or may bear interest at a fixed or floating rate subject to indexed note provisions, in all cases subject to the terms and conditions contained in this Base Prospectus that are applicable to fixed rate notes, floating rate notes or indexed notes, as the case may be, as specified in your final terms. Similarly, a note may provide for a payment of principal at maturity linked to an underlyer and also bear interest at a fixed or floating rate.

If you are a holder of an Indexed (Participation) note, you may receive a principal amount at maturity that is up to 10% less than the outstanding face amount of your note, depending upon the formula used to

determine the amount payable and the value of the applicable underlyer or underlyers at maturity. The value of the applicable underlyer or underlyers may fluctuate over time.

Unless otherwise specified in your final terms, any indexed notes that we issue will be cash settled only.

If you purchase an indexed note, your final terms will include information about the relevant underlyer or underlyers, about how any amounts that are to become payable will be determined by reference to the price or value of each underlyer, about any additional tax considerations. Unless the final terms otherwise specify, Goldman Sachs International will be the calculation agent that will calculate the amounts payable with respect to the indexed note and may exercise significant discretion in doing so. You should carefully read "Risk Factors — Considerations Relating to Indexed Notes" above.

If we redeem the notes upon a change in law as described below under "— Redemption and Repayment—Redemption Upon Change in Law" or following certain changes in the laws or regulations of any U.S. taxing authority as described below under "— Redemption and Repayment—Redemption Upon Obligation to Pay Additional Amounts", we may cancel such notes and, if permitted by applicable law, pay the purchaser of such notes an amount equal to the Non-Scheduled Early Repayment Amount. Additionally, we will also pay the Non-Scheduled Early Repayment Amount if an event of default occurs and the maturity of the note is accelerated. In any situation described in this paragraph, the Non-Scheduled Early Repayment Amount may be less than the outstanding face amount of your note. We describe the Non-Scheduled Early Repayment Amount in greater detail below under "Redemption and Repayment—Non-Scheduled Early Repayment Amount".

#### Original Issue Discount Notes, Including Zero Coupon Notes

If "Original Issue Discount" is specified in your final terms as being applicable, the notes are original issue discount notes. A note of this type is issued at a price lower than the amount payable at maturity and may provide that, upon redemption or acceleration of its maturity, an amount less than the amount payable at maturity will be payable. An original issue discount note may be a zero coupon note.

# Sinking Fund

The notes will not be entitled to the benefit of any sinking fund — that is, neither GS Finance Corp. nor The Goldman Sachs Group, Inc. will deposit money on a regular basis into a separate custodial account to repay your notes.

#### Information in the Final Terms

Your final terms will describe the specific terms of your note, which will include some or all of the following terms of your note:

- the tranche number;
- the specified currency or currencies for principal and interest;
- the authorized denomination;
- the issue price at which we originally issue your note, expressed as a percentage of the aggregate principal amount;
- the original issue date;
- the stated maturity, which will not be more than 40 years from the original issue date and, if applicable, any provisions for the extension of the stated maturity date;
- whether your note is a fixed rate note, a floating rate note, an indexed note or whether it combines elements of multiple types of notes as described above;

- whether your notes are represented by a global note or a master global note;
- if your note is a fixed rate note, the annual rate at which your note will bear interest for the relevant periods and the interest payment dates, if different from those stated under "— Interest Rates Fixed Rate Notes" below;
- if your note is a floating rate note, the interest rate basis for the relevant periods, which may be one of the base rates described under "— Interest Rates — Floating Rate Notes" below; any applicable underlyer (base rate) currency or maturity, spread or spread multiplier or initial base rate, maximum rate or minimum rate; and the interest reset, determination, calculation and payment dates, all of which we describe under "— Interest Rates — Floating Rate Notes" below; the day count convention used to calculate interest payments for any period; the business day convention; and the calculation agent;
- if your note is an indexed note, the principal amount, if any, we will pay you at maturity, the amount of interest, if any, we will pay you on the relevant interest payment date or dates and the formula(e) we will use to calculate these amounts, in addition to certain other information relating to the indexed note;
- whether your note is an original issue discount note and, if so, the yield to maturity;
- if applicable, the dates and prices at which your note may be redeemed at our option or repaid at the holder's option before the stated maturity, including any redemption or repayment commencement date, redemption or repayment date(s), redemption or repayment price(s) and redemption or repayment period(s), all of which we describe under "— Redemption and Repayment" below;
- whether application will be made to the London Stock Exchange for your note to be listed on the Official List of the London Stock Exchange and admitted to trading on the Main Market of the London Stock Exchange, and whether the notes will be listed on any other stock exchange; and
- any terms of guarantee of your debt security by The Goldman Sachs Group, Inc. that is different from or in addition to the description under "— Guarantee" below.

# **Notes Offered During Subscription Period**

The final terms will also specify if an offering of securities is open for subscription for a specified period of time and, if so, will specify the following:

- if applicable, the process for notification to applicants of the amount allotted and an indication whether dealing in the notes being offered may begin before such notification is made;
- any conditions to which the offer is subject;
- the total amount of the offer and how the amount of notes offered may be increased;
- if applicable, the time period during which the offer will be open and a description of the subscription process;
- if applicable, a description of the possibility to reduce subscriptions and the manner for refunding excess amounts paid by subscribers;
- if applicable, details of the minimum and/or maximum subscription amount;
- if applicable, the method and time limits for paying up the notes being offered;

- if applicable, our ability to extend, postpone, revoke and/or terminate an offer period;
- if applicable, a full description of the manner and date in which results of the offer are to be made public; or
- if applicable, the issue price at which we originally issue your note and the offer price, as determined by the Issuer in light of, among other considerations, prevailing market conditions, such as current interest rates.

# Market-Making Transactions

If you purchase your note in a market-making transaction, you will receive information about the issue price, trade and settlement dates in a separate confirmation of sale. A market-making transaction is one in which Goldman Sachs International or another of our affiliates resells a note it has previously acquired from another holder. A market-making transaction in a particular note occurs after the original issuance and sale of the note.

#### **Business Days**

The following definitions of "business day" may apply to any note, as specified in the applicable final terms:

If "Auckland" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Auckland generally are authorized or obligated by law, regulation or executive order to close.

If "Beijing" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Beijing generally are authorized or obligated by law, regulation or executive order to close.

If "Euro" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday on which the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET) System, or any successor system, is open for business.

If "Hong Kong" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Hong Kong generally are authorized or obligated by law, regulation or executive order to close.

If "London" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in London generally are authorized or obligated by law, regulation or executive order to close and, in the case of any note for which LIBOR is an interest rate basis, is also a day on which dealings in the applicable underlyer currency are transacted in the London interbank market.

If "Mexico City" is included in your final terms under "Business Day", it means each day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in Mexico City.

If "Mumbai" is included in your final terms under "Business Day", it means each day on which commercial banks are open for business (including dealings in foreign exchange and foreign currency deposits) in Mumbai, India.

If "Munich" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Munich generally are authorized or obligated by law, regulation or executive order to close.

If "New York" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York City generally are authorized or obligated by law, regulation or executive order to close.

If "Oslo" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Oslo generally are authorized or obligated by law, regulation or executive order to close.

If "Seoul" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Seoul generally are authorized or obligated by law, regulation or executive order to close.

If "Singapore" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Singapore generally are authorized or obligated by law, regulation or executive order to close.

If "Sydney" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Sydney generally are authorized or obligated by law, regulation or executive order to close.

If "Taipei" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Taipei generally are authorized or obligated by law, regulation or executive order to close.

If "Tokyo" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Tokyo generally are authorized or obligated by law, regulation or executive order to close.

If "Toronto" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Toronto generally are authorized or obligated by law, regulation or executive order to close.

If "Wellington" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Wellington generally are authorized or obligated by law, regulation or executive order to close.

If "Zurich" is included in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in Zurich generally are authorized or obligated by law, regulation or executive order to close.

If "U.S. Government Securities" is included in your final terms under "Business Day", it means each day that is not a Saturday or Sunday or a day on which The Securities Industry and Financial Markets Association's U.S. holiday schedule recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

If any other city is specified in your final terms under "Business Day", it means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in such city generally are authorized or obligated by law, regulation or executive order to close.

Where more than one Business Day is listed, a day must satisfy all of the relevant conditions in order to be a business day for your notes.

#### **Business Day Conventions**

As specified in the applicable final terms, the following business day conventions may apply to any note with regard to any relevant date other than one that falls on the stated maturity date or earlier redemption or repayment date:

If the "Business Day Convention" is specified in your final terms to be "Following" or "Following Adjusted" then, for any interest payment date, other than the stated maturity date or earlier redemption or repayment date, if such date would otherwise fall on a day that is not a business day, such date will be postponed to the next day that is a business day.

If the "Business Day Convention" is specified in your final terms to be "Modified Following" or "Modified Following Adjusted" then, for any interest payment date, other than the stated maturity date or earlier redemption or repayment date, if such date would otherwise fall on a day that is not a business day, such date will be postponed to the next day that is a business day; *provided* that, if such day would fall in the next succeeding calendar month, the date of payment with respect to such interest payment date will be advanced to the business day immediately preceding such interest payment date.

If the "Business Day Convention" is specified in your final terms to be "Following Unadjusted" then, for any interest payment date, other than the stated maturity date or earlier redemption or repayment date, that falls on a day that is not a business day, any payment due on such interest payment date will be postponed to the next day that is a business day; *provided* that interest due with respect to such interest payment date shall not accrue from and including such interest payment date to and including the date of payment of such interest as so postponed.

If the "Business Day Convention" is specified in your final terms to be "Modified Following Unadjusted" then, for any interest payment date, other than the stated maturity date or earlier redemption or repayment date, that falls on a day that is not a business day, any payment due on such interest payment date will be postponed to the next day that is a business day; *provided* that, that interest due with respect to such interest payment date shall not accrue from and including such interest payment date to and including the date of payment of such interest as so postponed; and *provided further* that if such day would fall in the next succeeding calendar month, the date of payment with respect to such interest payment date will be advanced to the business day immediately preceding such interest payment date.

In all cases, if the stated maturity date or any earlier redemption or repayment date with respect to a note falls on a day that is not a business day, any payment of principal, premium, if any, and interest otherwise due on such day will be made on the next succeeding business day, and no interest on such payment shall accrue for the period from and after the stated maturity date, redemption date or repayment date, as the case may be. Notwithstanding the foregoing, if your final terms specify "Final BDC Procedure" to be "Applicable", then: (i) if the "Business Day Convention" is specified to be "Modified Following Adjusted" or "Modified Following Unadjusted" and if the stated maturity date or any earlier redemption or repayment date, as postponed in accordance with the preceding sentence, would fall in the next succeeding calendar month, the date of payment with respect to such stated maturity date or earlier redemption or repayment date will be advanced to the business day immediately preceding such date and (ii) if the "Business Day Convention" is specified to be "Modified Tollowing Adjusted to be "Modified Following Adjusted to the business day immediately preceding such date and (ii) if the "Business Day Convention" is specified to be "Modified Following Adjusted" or "Following Adjusted", then interest shall accrue to the stated maturity date or any earlier redemption or repayment with the preceding sentence.

# Calculation of Interest

Calculations relating to floating rate notes and indexed notes that bear interest will be made by the calculation agent, an institution that we appoint as our agent for this purpose. That institution could include any affiliate of ours, such as Goldman Sachs International. The final terms for a particular note will name the institution that we have appointed to act as the calculation agent for that note as of its original issue date. Unless otherwise specified in the applicable final terms, we have initially appointed Goldman Sachs International as our calculation agent for all the floating rate and indexed notes. We may appoint a different institution to serve as calculation agent from time to time after the original issue date of the notes without

your consent and without notifying you of the change. We may also appoint different calculation agents for different notes. Absent manifest error, all determinations of the calculation agent will be final and binding on you and us, without any liability on the part of the calculation agent.

For each floating rate note, the calculation agent will determine, on the corresponding calculation or interest determination date, as described in "—Interest Rates—Floating Rate Notes" below, the interest rate that takes effect on each interest reset date. For each indexed note that bears interest, the calculation agent will determine, on the corresponding calculation or interest determination date the interest rate applicable to each interest period. In addition, the calculation agent will calculate the amount of interest that has accrued during each interest period — *i.e.*, the period from and including the original issue date, or the last date to which interest has been paid or made available for payment, to, but excluding, the payment date.

# Day Count Conventions

For each interest period, the calculation agent will calculate the amount of accrued interest as the product of the face amount of the note multiplied by the applicable interest rate multiplied by an accrued interest factor for the interest period. This factor will be determined in accordance with the "Day Count Fraction" specified in the applicable final terms, including the following:

- If "1/1 (ISDA)" is specified, the factor will be equal to 1.
- If "Actual/Actual (ISDA)", or "Act/Act (ISDA)" is specified, the factor will be equal to the actual number of days in the interest period divided by 365 (or, if any portion of that interest period falls in a leap year, the sum of (1) the actual number of days in that portion of the interest period falling in a leap year divided by 366 and (2) the actual number of days in that portion of the interest period falling in a non-leap year divided by 365).
- If "Actual/Actual (ICMA)" is specified, the factor will be equal to the number of days in the interest period, including February 29 in a leap year, divided by the product of (1) the actual number of days in such interest period and (2) the number of interest periods in the calendar year.
- If "Actual/Actual (Bond)" is specified, the factor will be equal to the number of calendar days in the interest period, divided by the number of calendar days in the interest period multiplied by the number of interest periods in the calendar year.
- If "Actual/Actual (Euro)" is specified, the factor will be equal to the number of calendar days in the interest period divided by 365 or, if the interest period includes February 29, 366.
- If "Actual/365 (Fixed)", "Act/365 (Fixed)", "A/365 (Fixed)" or "A365F" is specified, the factor will be equal to the actual number of days in the interest period divided by 365.
- If "Actual/360 (ISDA)", "Act/360 (ISDA)" or "A/360 (ISDA)" is specified, the factor will be equal to the actual number of days in the interest period divided by 360.
- If "Actual/360 (ICMA)" is specified, the factor will be equal to the number of calendar days in the period, including February 29 in a leap year, divided by 360 days.
- If "30/360 (ISDA)", "360/360 (ISDA)" or "Bond Basis (ISDA)" or "30/360" is specified, the factor will be equal to the number of days in the interest period in respect of which payment is being made divided by 360, calculated on a formula basis as follows:

Day Count Fraction =  $[360 \times (Y(2) - Y(1))] + [30 \times (M(2) - M(1))] + (D(2) - D(1))$ 360 where:

"Y(1)" is the year, expressed as a number, in which the first day of the interest period falls;

"Y(2)" is the year, expressed as a number, in which the day immediately following the last day included in the interest period falls;

"M(1)" is the calendar month, expressed as a number, in which the first day of the interest period falls;

"M(2)" is the calendar month, expressed as a number, in which the day immediately following the last day included in the interest period falls;

"D(1)" is the first calendar day, expressed as a number, of the interest period, unless such number would be 31, in which case D(1) will be 30; and

"D(2)" is the calendar day, expressed as a number, immediately following the last day included in the interest period, unless such number would be 31 and D(1) is greater than 29, in which case D(2) will be 30.

• If "30E/360", "30E/360 (ISDA)" or "Eurobond Basis" is specified, the factor will be equal to the number of days in the interest period in respect of which payment is being made divided by 360, calculated on a formula basis as follows:

Day Count Fraction = 
$$\frac{[360 \times (Y(2) - Y(1))] + [30 \times (M(2) - M(1))] + (D(2) - D(1))}{360}$$

where:

"Y(1)" is the year, expressed as a number, in which the first day of the interest period falls;

"Y(2)" is the year, expressed as a number, in which the day immediately following the last day included in the interest period falls;

"M(1)" is the calendar month, expressed as a number, in which the first day of the interest period falls;

"M(2)" is the calendar month, expressed as a number, in which the day immediately following the last day included in the interest period falls;

"D(1)" is the first calendar day, expressed as a number, of the interest period, unless (i) such number would be 31, or (ii), if "30E/360 (ISDA)" is specified, that day is the last day of February; in which case D(1) will be 30; and

"D(2)" is the calendar day, expressed as a number, immediately following the last day included in the interest period, unless (i) such number would be 31, or (ii), if "30E/360 (ISDA)" is specified, that day is the last day of February; in which case D(2) will be 30.

Unless otherwise specified in the applicable final terms, LIBOR notes and EURIBOR notes will be subject to the Actual/360 (ISDA) day count convention, and CMS rate notes will be subject to the Actual/Actual (ISDA) day count convention.

Upon the request of the holder of any floating rate note, the calculation agent will provide the interest rate then in effect, and, if determined, the interest rate that will become effective on the next interest reset date with respect to such floating rate note. The calculation agent's determination of any interest rate will be conclusive for all purposes and binding in the absence of manifest error.

All percentages resulting from any calculations relating to a note will be rounded upward or downward, as appropriate, to the next higher or lower one hundred-thousandth of a percentage point (*e.g.*, 9.876541% (or .09876541) being rounded down to 9.87654% (or .0987654) and 9.876545% (or .09876545) being rounded up to 9.87655% (or .0987655)). All amounts used in or resulting from any calculations will be rounded upward or downward, as appropriate, to the nearest cent, in the case of U.S. dollars and euros, to the nearest Japanese yen (with fractions equal to less than one-half JPY being rounded downward and fractions equal to or greater than one-half JPY being rounded upward) in the case of Japanese yen, or to the nearest corresponding hundredth of a unit, in the case of any other currency, with one-half of a corresponding hundredth of a unit or more being rounded upward. In determining the interest payments on your note, if your final terms specify the "Calculation Basis" to be "Per Denomination", then interest payments will be calculated on a per denomination basis and if your final terms specify the "Calculation Basis" to be "Notional", then interest payments will be calculated on the basis of the outstanding face amount of your notes.

In determining the base rate that applies to a floating rate note during a particular interest period, the calculation agent may obtain rate quotes from various banks or dealers active in the relevant market, as described in the following subsections. Those reference banks and dealers may include the calculation agent itself and its affiliates, as well as any agent participating in the distribution of the relevant floating rate notes and its affiliates, and they may include affiliates of GS Finance Corp.

With respect to any floating rate note listed on the Official List of the London Stock Exchange, the calculation agent communicates the interest rate for each interest period, together with the amount of interest which will accrue in respect of the note's minimum denomination during such interest period, the interest payment date on which such interest will be payable, the interest period and the number of days in the interest period, to GS Finance Corp., Clearstream, Luxembourg, Euroclear, any paying agent and the London Stock Exchange no later than noon, London time, on the first day of such interest period. The published amount of interest to accrue and the interest payment date may subsequently be modified without notice in the event that the interest period is shortened or lengthened pursuant to the terms of the note.

# Role of Calculation Agent and Exchange Rate Agent

All determinations made by the calculation agent and exchange rate agent will be in their sole discretion unless we state otherwise. In the absence of manifest error, those determinations will be conclusive for all purposes and binding on the holder and on us, without any liability on the part of the calculation agent or exchange rate agent, respectively. Calculations relating to floating rate notes and indexed notes and adjustments with respect to any index, currencies or other relevant underlyers will be made by the calculation agent.

We shall take such action as shall be necessary to ensure that there is at all relevant times a financial institution serving as the calculation agent and exchange rate agent, if applicable, under the notes. We may, in our sole discretion at any time and from time to time, upon written notice to the fiscal agent, but without notice to any holder, terminate the appointment of the calculation agent or exchange rate agent, if applicable, and appoint another agent (including any of our affiliates). Insofar as the notes provide for the calculation agent or exchange rate agent to obtain information from any institution or other source, the calculation agent or exchange rate agent may do so from any source or sources of the kind contemplated or otherwise permitted, notwithstanding that any one or more of such sources are an agent, affiliate of such agent or affiliate of ours. We assume no responsibility to verify the accuracy of such information.

# Change in Law

Following the determination by the calculation agent that a change in law (as defined in the following paragraph) has occurred, the calculation agent will determine, acting in good faith and in a commercially reasonable manner, the appropriate adjustment, if any, to be made to any one or more of the terms of the notes, including, without limitation, any term relating to amounts payable on such notes, as the calculation agent determines appropriate to account for the effect of the change in law, and shall determine the effective date of such adjustments, provided that the calculation agent shall only make such adjustments in order to preserve as closely as commercially practicable the economic objective and rationale of the notes before

such adjustments. We may also redeem, in whole but not in part, any outstanding issuance of notes in the event of a change in law, as described under "— Redemption and Repayment — Redemption Upon Change in Law" below.

A change in law means that, on or after the settlement date, as a result of (i) the adoption of, or any change in, any applicable law, rule, regulation, judgment, order, sanction, or directive of any governmental, administrative, legislative or judicial authority ("applicable law") or (ii) the promulgation of, or any change in, the formal or informal interpretation of any applicable law by a court, tribunal or regulatory authority with competent jurisdiction (including any action by a taxing authority), the calculation agent determines that (a) the performance by us and/or any of our affiliates under such notes, (b) the performance by us, The Goldman Sachs Group, Inc. and/or any of our or its affiliates under any related hedge positions (whether with respect to the relevant index to which such notes are linked or any constituent thereof) or (c) the performance by any of our or The Goldman Sachs Group, Inc.'s affiliates under such notes had such affiliate been an issuer of the notes or under any related hedge positions (whether with respect to the relevant index to which the notes are linked or any constituent thereof) had such affiliate been a party to any such hedging arrangement, (x) in the case of (a) will, or there is a substantial likelihood in the immediate future that it will, result in a materially increased (including, without limitation, due to any increase in tax liability, decrease in tax benefit, or other adverse effect on its tax position) cost to us, The Goldman Sachs Group, Inc. or our or its affiliates in performing our obligations under the notes, or (y) in the case of (a), (b) or (c) has, or there is a substantial likelihood in the immediate future that it will, become unlawful or impractical in whole or in part.

"Hedge positions" means any one or more securities positions, derivatives positions or other instruments or arrangements (howsoever described) purchased, sold, entered into or maintained by the us or any of our affiliates, in order to hedge, or otherwise in connection with, the notes, including, for the avoidance of doubt, any such positions in respect of the assets that may be required to be delivered in connection with any physical settlement of the notes, as specified in the relevant final terms.

#### **Interest Rates**

This subsection describes the different kinds of interest rates that may apply to your note, if it bears interest. A note which bears interest at one or more fixed rates for all interest periods is described as a "Fixed Rate Note". A note which bears interest at one or more floating rates for all interest periods is described as a "Floating Rate Note". A note which bears interest for some or all interest periods at one or more of the rates determined as described under "— Indexed Notes" below is described as an "Indexed Note" (although it may bear interest for certain interest periods at a fixed rate or a floating rate).

# **Fixed Rate Notes**

A note of this type will bear interest at the fixed rate specified in your final terms for each interest period for which "Fixed Rate" is specified as Applicable. This type includes notes which bear no interest (which we refer to as "zero coupon notes") and / or may be instead issued at a price lower than the principal amount (which we refer to as "original issue discount notes" or "discount notes") and / or pay a multiple of the face amount at maturity. See "— Features Common to All Notes — Original Issue Discount Notes" above for more information about zero coupon and other original issue discount notes.

Each fixed rate note, except any zero coupon note or discount note, will bear interest from the "Interest Commencement Date" specified in your final terms or from the most recent interest payment date to which interest on the note has been paid or made available for payment. Interest will accrue on the principal of a fixed rate note at a fixed rate per annum, or at fixed rates per annum, stated in applicable final terms as the "Interest Rate", until the principal is paid or made available for payment or the note is converted or exchanged. Your final terms will describe the interest rates applicable to each interest period if the interest rate changes over the term of the note (as described below), and relevant interest payment dates on which interest on fixed rate notes will be payable. The interest period for each payment of interest due on an interest payment date or at maturity will include interest accrued from and including the last date to which interest has been paid or made available for payment, or from the interest commencement date if none has been paid or made available for payment, to, but excluding, the interest payment date, the date of maturity or the relevant early redemption date, in each case subject to the business day convention. We will compute interest on fixed rate notes on the basis of the day count convention specified in your final terms; see "— Day Count Conventions" above. We will pay interest on each interest payment date and at maturity as described under "— Payment Mechanics for Notes" below.

If "Original Issue Discount" is specified in your final terms as being applicable, the applicable final terms will specify the "OID", "Accretion Date" and "Accretion Rate". An original issue discount note may be a zero coupon note. The accreted value will be (1) as of any date prior to the stated maturity date, an amount equal to the *sum of* (A) the original issue price of your note *plus* (B) the portion of the excess of the amount payable at maturity of your note over the original issue price which shall have been accreted from the issue price on a daily basis and compounded annually on the "Accretion Date" each year specified in the applicable final terms, up to and including the stated maturity date, at a rate per annum equal to the "Accretion Rate" specified in the applicable final terms from the original issue date, computed on the basis of a 360-day year consisting of twelve 30-day calendar months *plus* (C) any accrued but unpaid interest as of such date; and (2) as of any date on or after the stated maturity date, the amount payable at maturity (final redemption amount) on your notes *plus* accrued but unpaid interest as of such date.

# Floating Rate Notes

In this subsection, we use several specialized terms relating to the manner in which floating interest rates are calculated. These terms appear in **bold**, **italicized** type the first time they appear, and we define these terms in "— Special Rate Calculation Terms" at the end of this subsection.

A note of this type will bear interest at rates that are determined by reference to one of the interest rate formulae described below for the interest periods for which "Floating Rate" is specified as Applicable in your final terms. In some cases, the rates may be adjusted by adding or subtracting a spread or multiplying by a spread multiplier and may be subject to a minimum rate or a maximum rate, as described in greater detail below. If your note is a floating rate note, the formula and any adjustments that apply to the interest rate will be specified in your final terms.

Each floating rate note will bear interest from its original issue date or from the most recent interest payment date to which interest on the note has been paid or made available for payment. Unless your final terms indicate that "Compounding Interest" (described further below) is applicable, interest will accrue on the principal of a floating rate note at the annual rate determined according to the interest rate formula stated in the note and the applicable final terms, until the principal is paid or made available for payment. We will pay interest on each interest payment date and at maturity as described under "— Payment Mechanics for Notes" below.

# Base Rates

We currently expect to issue floating rate notes that bear interest at rates based on one or more of the following base rates:

- LIBOR;
- EURIBOR;
- the USD CMS rate;
- Euro interest rate swap (EURIBOR BASIS EUR);
- SOFR; and/or
- MXN TIIE Banxico.

We describe each of these base rates in further detail below in this subsection. If you purchase a floating rate note, your final terms will specify the type of "Base Rate" that applies to your note. A note may bear interest at any of the base rates specified above or another base rate, as described under "—Screen Rate Determination" below.

# Spread or Spread Multiplier

In some cases, the base rate for a floating rate note may be adjusted:

- by adding or subtracting a percentage or a specified number of basis points called the spread (with one basis point being 0.01%);
- by multiplying the base rate by a specified percentage, called the spread multiplier, which may be less than one hundred percent or may be negative; or
- by a combination of the foregoing.

If you purchase a floating rate note, your final terms will specify whether a "Spread" or "Spread Multiplier" will apply to your note and, if so, the amount of the spread or spread multiplier.

# Maximum and Minimum Rates

The actual interest rate, after being adjusted by the spread or spread multiplier, may also be subject to either or both of the following limits:

- a maximum rate *i.e.*, a specified upper limit that the actual interest rate in effect at any time may not exceed; and/or
- a minimum rate *i.e.*, a specified lower limit that the actual interest rate in effect at any time may not fall below.

If you purchase a floating rate note, your final terms will specify whether a "Maximum Rate" and/or "Minimum Rate" will apply to your note and, if so, what those rates are.

In addition, if your final terms indicate that "Base Rate 0% Floor" is applicable, then, if the base rate is negative in respect of any interest period, the base rate will be deemed to equal 0.00% for such interest period.

Whether or not a maximum rate applies, the interest rate on a floating rate note will in no event be higher than the maximum rate permitted by New York law, as it may be modified by U.S. law of general application. Under current New York law, the maximum rate of interest, with some exceptions, for any loan in an amount less than \$2,500,000 is 25% per year on a simple interest basis. No limits apply to loans of \$2,500,000 or more.

# Compounding Interest

If your final terms indicate that "Compounding Interest" is applicable, then for each interest period, the rate of interest applicable to your note will be equal to (x) (i) the *sum of* one *plus* the base rate, (ii) raised to the *power of* the *quotient* of (a) one *divided by* (b) the number of interest payment dates scheduled to occur in each year (y) *minus* one.

The rest of this subsection describes how the interest rate and the interest payment dates will be determined, and how interest will be calculated, on a floating rate note.

# Interest Reset Dates

The rate of interest on a floating rate note (other than a SOFR note) will be reset, by the calculation agent described below, daily, weekly, monthly, quarterly, semi-annually or annually (each, an "interest reset

period"). The date on which the interest rate resets and the reset rate becomes effective is called the interest reset date. The interest reset date will be as follows:

- for floating rate notes that reset daily, each business day;
- for floating rate notes that reset weekly and are not treasury rate notes, the Wednesday of each week;
- for treasury rate notes that reset weekly, the Tuesday of each week, except as otherwise described in the next to last paragraph under "— Interest Determination Dates" below;
- for floating rate notes that reset monthly, the third Wednesday of each month;
- for floating rate notes that reset quarterly, the third Wednesday of March, June, September and December of each year;
- for floating rate notes that reset semi-annually, the third Wednesday of each of two months of each year as specified in the applicable final terms; and
- for floating rate notes that reset annually, the third Wednesday of one month of each year as specified in the applicable final terms.

For a floating rate note (other than a SOFR note), the interest rate in effect on any particular day will be the interest rate determined with respect to the latest interest reset date that occurs on or before that day. There are several exceptions, however, to the reset provisions described above.

Except with respect to SOFR notes, the base rate in effect from and including the original issue date to, but excluding, the first interest reset date will be the initial base rate. For floating rate notes that reset daily or weekly, the base rate in effect for each day following the second business day before an interest payment date to, but excluding, the interest payment date, and for each day following the second business day before the maturity date to, but excluding, the maturity date, will be the base rate in effect on that second business day.

If any interest reset date would otherwise be a day that is not a business day, the interest reset date will be adjusted in accordance with the applicable business day convention.

# Interest Determination Dates

The interest rate that takes effect on an interest reset date for an interest period will be determined by the calculation agent by reference to a particular date called an interest determination date for floating rate notes other than SOFR notes. The interest determination dates applicable to each interest period will be specified as the "Interest Determination Dates" in the applicable final terms. If any interest determination date would otherwise be a day that is not a business day, the interest determination date will be adjusted in accordance with the applicable business day convention.

# Interest Calculation Dates

As described above, the interest rate that takes effect on a particular interest reset date will be determined by reference to the corresponding interest determination date for floating rate notes other than SOFR notes. Except for LIBOR notes and EURIBOR notes, however, the determination of the rate will actually be made on a day no later than the corresponding interest calculation date. The interest calculation date will be the earlier of the following:

• the tenth calendar day after the interest determination date or, if that tenth calendar day is not a business day, the next succeeding business day;

- the business day immediately preceding the interest payment date or the maturity date, whichever is the day on which the next payment of interest will be due; or
- in the case of floating rate notes listed on the Official List of the London Stock Exchange, the first date of the interest period *i.e.*, the period from and including the original issue date, or the last date interest was paid or made available for payment, to, but excluding, the payment date beginning on or after the interest reset date.

The calculation agent need not wait until the relevant interest calculation date to determine the interest rate if the rate information it needs to make the determination is available from the relevant sources sooner.

# Interest Payment Dates

The interest payment dates for a floating rate note will depend on when the interest rate is reset and, unless otherwise specified in the applicable final terms, will be as follows:

- for floating rate notes that reset daily, weekly or monthly, on the third Wednesday of each month or the third Wednesday of March, June, September and December of each year, as specified in the applicable final terms;
- for floating rate notes that reset quarterly, on the third Wednesday of March, June, September and December of each year;
- for floating rate notes that reset semi-annually, on the third Wednesday of the two months of each year specified in the applicable final terms; or
- for floating rate notes that reset annually, on the third Wednesday of the month specified in the applicable final terms.

Regardless of these rules, if a note is originally issued after the regular record date and before the date that would otherwise be the first interest payment date, the first interest payment date will be the date that would otherwise be the second interest payment date. We define "regular record date" under "— Payment Mechanics for Notes — Who Receives Payment?" below. If any interest payment date would otherwise be a day that is not a business day, the interest payment date will be adjusted in accordance with the applicable business day convention.

# **EURIBOR Notes**

If you purchase a "EURIBOR" note ("Base Rate": EURIBOR), your note will bear interest at a base rate equal to the interest rate for deposits in euros designated as "EURIBOR" and currently administered by the European Money Markets Institute (or its successor) for purposes of compiling and publishing that rate. In addition, the EURIBOR base rate will be adjusted by the spread or spread multiplier, if any, specified in your final terms. EURIBOR will be determined in the following manner:

EURIBOR for the relevant interest reset date will be the offered rate for deposits in euros having the underlyer maturity specified in your final terms, as that rate appears on the Reuters screen EURIBOR01 page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page) as of approximately 11:00 A.M., Brussels time, on the relevant EURIBOR interest determination date.

If the calculation agent determines, in its discretion and acting in good faith and in a commercially reasonable manner, that an original primary rate event has occurred in respect of the EURIBOR base rate which may adversely affect the interest of holders (including but not limited to the fact that the EURIBOR base rate, as the case may be, is no longer relevant to and does not reflect the original economic objective and rationale of the notes), then the calculation agent will select a replacement primary rate as described under "Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR Notes and USD CMS Rate Notes" below.

If the rate described above does not so appear on the Reuters screen EURIBOR01 page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page), then unless the calculation agent determines that an original primary rate event and its related adjustment date have occurred, as provided in the preceding paragraph, the following will apply:

• The calculation agent, after consulting such sources as it deems comparable to the foregoing display page, or any such source it deems reasonable, shall determine EURIBOR for that interest reset date in its sole discretion.

# Euro Interest Rate Swap Notes

If you purchase a Euro interest rate swap note ("Base Rate": EURIBOR BASIS - EUR), your note will bear interest at a base rate equal to the annual swap rate for Euro swap transactions, adjusted by the spread or spread multiplier, if any, specified in your final terms.

The annual swap rate for euro swap transactions for a reset date (the "Euro Interest Swap Rate") will be the annual swap rate for euro swap transactions with a maturity of the Designated Maturity, expressed as a percentage, which appears on the Reuters Screen ICESWAP2 Page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page) under the heading "EURIBOR BASIS - EUR" and above the caption "11:00AM FRANKFURT" as of 11:00 a.m., Frankfurt time, on the day that is two TARGET Settlement Days preceding such Reset Date("Applicable Interest Determination Date").

If the calculation agent determines, in its discretion and acting in good faith and in a commercially reasonable manner, that an original primary rate event has occurred in respect of the Euro Interest Swap Rate which may adversely affect the interest of holders (including but not limited to the fact that the Euro Interest Swap Rate, as the case may be, is no longer relevant to and does not reflect the original economic objective and rationale of the notes), then the calculation agent will select a replacement primary rate as described under "Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR Notes and USD CMS Rate Notes" below.

If the rate described above does not so appear on the Reuters screen ICESWAP2 page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page), then unless the calculation agent determines that an original primary rate event and its related adjustment date have occurred, as provided in the preceding paragraph, the rate for such interest reset date will be determined by the Calculation Agent in its discretion, acting in good faith and in a commercially reasonable manner, on the basis of the relevant internally marked mid-rate (derived from externally executable bid and ask prices) of the Calculation Agent at 11:00 a.m., Frankfurt time, on the Applicable Interest Determination Date, applying principles that are recognized in the financial services industry for determining the value of such rate.

# LIBOR Notes

If you purchase a LIBOR note ("Base Rate": LIBOR), your note will bear interest at a base rate equal to LIBOR, which will be the London interbank offered rate for deposits in U.S. dollars or any other **underlyer currency**, as specified in your final terms. In addition, the applicable LIBOR base rate will be adjusted by the spread or spread multiplier, if any, specified in your final terms. LIBOR will be determined in the following manner:

LIBOR will be the offered rate appearing on the Reuters screen LIBOR01 page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page) as of 11:00 A.M., London time, on the relevant LIBOR interest determination date, for deposits of the relevant underlyer currency having the relevant underlyer maturity beginning on the relevant interest reset date. Your final terms will indicate the underlyer currency and the underlyer maturity that apply to your LIBOR note.

With respect to LIBOR notes for which the underlyer currency is U.S. dollars ("USD LIBOR notes"), if the calculation agent determines that a benchmark transition event and its related benchmark

replacement date have occurred prior to the reference time in respect of any determination of the benchmark on any date as described under "Effect of Benchmark Transition Event on USD LIBOR Notes" below, the provisions set forth under "Effect of Benchmark Transition Event on USD LIBOR Notes" below shall apply, and the benchmark replacement will replace the then-current benchmark for all purposes relating to the notes in respect of such determination on such date and all determinations on all subsequent dates. In connection with the implementation of a benchmark replacement, the calculation agent will have the right to make benchmark replacement conforming changes from time to time.

With respect to LIBOR notes other than USD LIBOR notes, if the calculation agent determines, in its discretion and acting in good faith and in a commercially reasonable manner, that an original primary rate event has occurred in respect of the LIBOR base rate which may adversely affect the interest of holders (including but not limited to the fact that the LIBOR base rate, as the case may be, is no longer relevant to and does not reflect the original economic objective and rationale of the notes), then the calculation agent will select a replacement primary rate as described under "Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR Notes and USD CMS Rate Notes" below.

If the rate described above does not so appear on the Reuters screen LIBOR01 (or if specified in your final terms, the underlyer screen page) (or any successor or replacement page), unless the calculation agent determines that (i) with respect to USD LIBOR notes, a benchmark transition event and its related benchmark replacement date have occurred, or (ii) with respect to LIBOR notes other than USD LIBOR notes, an original primary rate event and its related adjustment date have occurred, as so provided in the previous two paragraphs, the following will apply:

• The calculation agent, after consulting such sources as it deems comparable to the foregoing display page, or any such source it deems reasonable, shall determine LIBOR (including USD LIBOR) for the applicable interest reset date in its sole discretion.

# MXN TIIE Banxico

If you purchase an "MXN TIIE Banxico" note ("Base Rate": MXN TIIE Banxico), your note will bear interest at a base rate equal to the MXN TIIE Banxico, adjusted by the spread or spread multiplier, if any, specified in your final terms.

MXN TIIE Banxico shall be the Tasa de Interés Interbancaria de Equilibrio (Interbank Equilibrium Interest Rate) ("TIIE") for Mexican Pesos having the index maturity specified in the applicable final terms which is published in the "Diario Oficial de la Federación" (Official Gazette of the Federation) by 11.00 a.m., Mexico City time on the relevant interest determination date. The rate may be replicated as set forth under the heading "TIIE" for the index maturity specified in the applicable final terms or its equivalent as published on the Banco de México's website, or on the Reuters Screen MEX06 Page across from the caption "TIIE" for the applicable index maturity or its equivalent, in either case as of 2.00 p.m., Mexico City time, on the day that is one Mexico City Business Day preceding the relevant interest determination date. In the event of any discrepancy between the rate published in the Diario Oficial de la Federación and the rate published on the Banco de México's website, or on the Reuters Screen MEX06 Page on the day that is one Mexico City Business Day preceding the relevant interest determination date. In the event of any discrepancy between the rate published in the Diario Oficial de la Federación and the rate published on the Banco de México's website, or on the Reuters Screen MEX06 Page on the day that is one Mexico City Business Day preceding the relevant interest determination date, the rate published in the Diario Oficial de la Federación will govern. For the avoidance of doubt, if the rate is not published in the Diario Oficial de la Federación, rates replicated on the Banco de México's website or on the Reuters Screen MEX06 Page are not valid.

In the event that the MXN TIIE Banxico rate is not published in the Diario Oficial de la Federación on any interest determination date, the Calculation Agent, after consulting any source it deems reasonable, shall determine the MXN TIIE Banxico rate with respect to such interest determination date in its sole discretion.

#### SOFR Notes

If you purchase a "SOFR" note ("Base Rate": SOFR), your note will bear interest at a base rate equal to compounded SOFR, adjusted by the spread or spread multiplier, if any, specified in your final terms.

Unless otherwise specified in your final terms, compounded SOFR will be determined by the calculation agent using the formula described below, with the resulting percentage being rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (0.00000005 being rounded upwards):

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SOFR_i \ x \ n_i}{360}\right) - 1\right] \ x \ \frac{360}{d}$$

where for purposes of applying the above formula to the terms of the applicable SOFR note:

"**d0**", for any observation period, is the number of U.S. government securities business days in the relevant observation period;

*"i*" is a series of whole numbers from one to d0, each representing the relevant U.S. government securities business day in chronological order from, and including, the first U.S. government securities business day in the relevant observation period;

"**SOFR***i*", for any day "*i*" in the relevant observation period, is equal to the SOFR in respect of that day;

"**n***i*", for day "*i*" in the relevant observation period, is the number of calendar days from, and including, such U.S. government securities business day "*i*" up to, but excluding, the following U.S. government securities business day; and

"d" is the number of calendar days in the relevant observation period.

Notwithstanding the foregoing, if the calculation agent determines that a benchmark transition event and its related benchmark replacement date have occurred prior to the interest determination date in respect of any interest payment date, the benchmark replacement will replace the then-current benchmark for all purposes relating to the SOFR notes in respect of such determination on such date and all determinations on all subsequent dates.

In connection with the implementation of a benchmark replacement, the calculation agent will have the right to make benchmark replacement conforming changes from time to time.

Any determination, decision or election that may be made by the calculation agent pursuant to the provisions described in this section entitled "—Interest Rates— Floating Rate Notes — SOFR Notes", including any determination with respect to a rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent manifest error, may be made in the calculation agent's sole discretion, and, notwithstanding anything to the contrary in the documentation relating to the SOFR notes, shall become effective without consent from any other party.

The calculation agent's determination of any benchmark, and its calculation of the amount of interest for any observation period or interest period, will be on file at our principal offices and will be made available to any security holder upon request.

As used in this section entitled "-Interest Rates - Floating Rate Notes - SOFR Notes":

The term "**SOFR**" means, with respect to any date:

- (1) the Secured Overnight Financing Rate published for such date as such rate appears on the Federal Reserve Bank of New York's Website at 3:00 p.m. (New York time) on the immediately following U.S. government securities business day.
- (2) if the rate specified in (1) above does not so appear, the Secured Overnight Financing Rate as published in respect of the first preceding U.S. government securities business day for which the Secured Overnight Financing Rate was published on the Federal Reserve Bank of New York's Website.

The term "**benchmark**" means, initially, compounded SOFR, as defined above; provided that if a benchmark transition event and its related benchmark replacement date have occurred with respect to compounded SOFR or the then-current benchmark, then "benchmark" means the applicable benchmark replacement.

The term "**benchmark replacement**" means the first alternative set forth in the order below that can be determined by the calculation agent as of the benchmark replacement date:

- the sum of: (a) the alternate rate of interest that has been selected or recommended by the relevant governmental body as the replacement for the then-current benchmark and (b) the benchmark replacement adjustment;
- (2) the sum of: (a) the ISDA fallback rate and (b) the benchmark replacement adjustment;
- (3) provided that if (i) the benchmark replacement cannot be determined in accordance with clause (1) or (2) above as of the benchmark replacement date or (ii) the calculation agent shall have determined that the ISDA fallback rate determined in accordance with clause (2) above is not an industry- accepted rate of interest as a replacement for the then-current benchmark for U.S. dollar-denominated floating rate debt securities at such time, then the benchmark replacement shall be the sum of: (a) the alternate rate of interest that has been selected by the calculation agent as the replacement for the then-current benchmark giving due consideration to any industry-accepted rate of interest as a replacement for the then-current benchmark for U.S. dollar-denominated floating rate debt securities at such time and (b) the benchmark replacement adjustment.

The term "**benchmark replacement adjustment**" means the first alternative set forth in the order below that can be determined by the calculation agent as of the benchmark replacement date:

- the spread adjustment (which may be a positive or negative value or zero), or method for calculating or determining such spread adjustment, that has been selected or recommended by the relevant governmental body for the applicable unadjusted benchmark replacement;
- (2) if the applicable unadjusted benchmark replacement is equivalent to the ISDA fallback rate, then the ISDA fallback adjustment;
- (3) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the calculation agent giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current benchmark with the applicable unadjusted benchmark replacement for U.S. dollar-denominated floating rate debt securities at such time.

The term "**benchmark replacement conforming changes**" means, with respect to any benchmark replacement, any technical, administrative or operational changes (including changes to the definitions of "interest period", "interest determination date" and "observation period", timing and frequency of

determining rates and making payments of interest, and other administrative matters) that the calculation agent decides may be appropriate to reflect the adoption of such benchmark replacement in a manner substantially consistent with market practice (or, if the calculation agent decides that adoption of any portion of such market practice is not administratively feasible or if the calculation agent determines that no market practice for use of the benchmark replacement exists, in such other manner as the calculation agent determines is reasonably necessary).

The term **"benchmark replacement date"** means the earliest to occur of the following events with respect to the then-current benchmark:

- (1) in the case of clause (1) or (2) of the definition of "benchmark transition event," the later of

   (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the benchmark permanently or indefinitely ceases to provide the benchmark; or
- (2) in the case of clause (3) of the definition of "benchmark transition event," the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the benchmark replacement date occurs on the same day as the interest determination date, but earlier than the reference time on that date, the benchmark replacement date will be deemed to have occurred prior to the reference time for such determination.

For the avoidance of doubt, for purposes of the definitions of benchmark replacement date and benchmark transition event in this section entitled "— Interest Rates — Floating Rate Notes — SOFR Notes", references to benchmark also include any reference rate underlying such benchmark.

The term "**benchmark transition event**" means the occurrence of one or more of the following events with respect to the then-current benchmark:

- a public statement or publication of information by or on behalf of the administrator of the benchmark announcing that such administrator has ceased or will cease to provide the benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the benchmark;
- (2) a public statement or publication of information by the regulatory supervisor for the administrator of the benchmark, the central bank for the currency of the benchmark, an insolvency official with jurisdiction over the administrator for the benchmark, a resolution authority with jurisdiction over the administrator for the benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the benchmark, which states that the administrator of the benchmark has ceased or will cease to provide the benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the benchmark; or
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of the benchmark announcing that the benchmark is no longer representative.

The term "Federal Reserve Bank of New York's Website" means the website of the Federal Reserve Bank of New York at <u>http://www.newyorkfed.org</u>, or any successor source.

The term "**interest determination date**" means the date falling the number of U.S. government securities business days equal to the observation period offset preceding each interest payment date.

The term "**ISDA definitions**" means the 2006 ISDA definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

The term "**ISDA fallback adjustment**" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA definitions to be determined upon the occurrence of an index cessation event with respect to the benchmark for the applicable tenor.

The term "**ISDA fallback rate**" means the rate that would apply for derivatives transactions referencing the ISDA definitions to be effective upon the occurrence of an index cessation date with respect to the benchmark for the applicable tenor excluding the applicable ISDA fallback adjustment.

The term "**observation period**" means, in respect of each interest period, the period from, and including, (i) the date falling the number of U.S. government securities business days equal to the observation period offset preceding the first date in such interest period to, but excluding, (ii) the date falling the number of U.S. government securities business days equal to the observation period offset preceding the first date in such interest period to the observation period offset preceding the interest period.

The term "**observation period offset**" means five (5) U.S. government securities business days, or such other number of U.S. government securities business days as specified in the applicable final terms.

The term "**reference time**" with respect to any determination of the benchmark means (1) if the benchmark is compounded SOFR, 3:00 p.m. (New York time) on the date of such determination, and (2) if the benchmark is not compounded SOFR, the time determined by the calculation agent in accordance with the benchmark replacement conforming changes.

The term "**relevant governmental body**" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

The term "**unadjusted benchmark replacement**" means the benchmark replacement excluding the benchmark replacement adjustment.

The term "**U.S. government securities business day**" means any day other than a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

# Effect of Benchmark Transition Event on USD LIBOR Notes

If the calculation agent determines, with respect to USD LIBOR notes, that a benchmark transition event and its related benchmark replacement date have occurred prior to the reference time in respect of any determination of the benchmark on any date the benchmark replacement will replace the then-current benchmark for all purposes relating to the USD LIBOR notes in respect of such determination on such date and all determinations on all subsequent dates. In connection with the implementation of a benchmark replacement, the calculation agent will have the right to make benchmark replacement conforming changes from time to time.

Any determination, decision or election that may be made by the calculation agent pursuant to the benchmark transition provisions described herein, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent manifest error, may be made in the calculation agent's sole discretion, and, notwithstanding anything to the contrary in the documentation relating to the notes, shall become effective without consent from the holders of the notes or any other party. For the avoidance of doubt, the calculation agent may change the terms of notes in order to implement such determination, decision or election.

The calculation agent's determination of the benchmark, and its calculation of the amount of interest for any relevant interest period, will be on file at our principal offices, will be made available to any holder of the notes upon request.

Defined terms used above:

The term "**benchmark**" means, initially, USD LIBOR; provided that if a benchmark transition event and its related benchmark replacement date have occurred with respect to USD LIBOR or the then-current benchmark, then "benchmark" means the applicable benchmark replacement.

The term "**benchmark replacement**" means the interpolated benchmark; provided that if the calculation agent cannot determine the interpolated benchmark as of the benchmark replacement date, then "benchmark replacement" means the first alternative set forth in the order below that can be determined by the calculation agent as of the benchmark replacement date:

- (1) the sum of: (a) term SOFR and (b) the benchmark replacement adjustment;
- (2) the sum of: (a) compounded SOFR and (b) the benchmark replacement adjustment;
- (3) the sum of: (a) the alternate rate of interest that has been selected or recommended by the relevant governmental body as the replacement for the then-current benchmark for the applicable corresponding tenor and (b) the benchmark replacement adjustment;
- (4) the sum of: (a) the ISDA fallback rate and (b) the benchmark replacement adjustment;
- (5) provided that if (i) the benchmark replacement cannot be determined in accordance with clause (3) or (4) above as of the benchmark replacement date or (ii) the calculation agent shall have determined that the ISDA fallback rate determined in accordance with clause (4) above is not an industry-accepted rate of interest as a replacement for the then-current benchmark for U.S. dollar denominated floating rate notes at such time, then the benchmark replacement shall be the sum of: (a) the alternate rate of interest that has been selected by the calculation agent as the replacement for the then-current benchmark for the applicable corresponding tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current benchmark for U.S. dollar-denominated floating rate fixed income instruments at such time and (b) the benchmark replacement adjustment.

The term "*benchmark replacement adjustment*" means the first alternative set forth in the order below that can be determined by the calculation agent as of the benchmark replacement date:

- (1) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the relevant governmental body for the applicable unadjusted benchmark replacement;
- (2) if the applicable unadjusted benchmark replacement is equivalent to the ISDA fallback rate, then the ISDA fallback adjustment;
- (3) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the calculation agent giving due consideration to any industryaccepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current benchmark with the applicable unadjusted benchmark replacement for U.S. dollar-denominated floating rate fixed income instruments at such time.

The term "*benchmark replacement conforming changes*" means, with respect to any benchmark replacement, any technical, administrative or operational changes (including changes to the definitions of "business day" and "interest period", timing and frequency of determining rates, and making payments of

interest, rounding of amounts or tenors and other administrative matters) that the calculation agent decides may be appropriate to reflect the adoption of such benchmark replacement in a manner substantially consistent with market practice (or, if the calculation agent decides that adoption of any portion of such market practice is not administratively feasible or if the calculation agent determines that no market practice for use of the benchmark replacement exists, in such other manner as the calculation agent determines is reasonably necessary).

The term "*benchmark replacement date*" means the earliest to occur of the following events with respect to the then-current benchmark:

- (1) in the case of clause (1) or (2) of the definition of "benchmark transition event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the benchmark permanently or indefinitely ceases to provide the benchmark; or
- (2) in the case of clause (3) of the definition of "benchmark transition event," the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the benchmark replacement date occurs on the same day as, but earlier than, the reference time in respect of any determination, the benchmark replacement date will be deemed to have occurred prior to the reference time for such determination.

Solely for purposes of the definitions of benchmark replacement date and benchmark transition event, references to "benchmark" also include any reference rate underlying such benchmark (for example, if the benchmark becomes the sum of (a) compounded SOFR and (b) the benchmark replacement adjustment in accordance with clause (2) of the definition of "benchmark" replacement, references to benchmark would include SOFR).

The term "*benchmark transition event*" means the occurrence of one or more of the following events with respect to the then-current benchmark:

- (1) a public statement or publication of information by or on behalf of the administrator of the benchmark announcing that such administrator has ceased or will cease to provide the benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the benchmark;
- (2) a public statement or publication of information by the regulatory supervisor for the administrator of the benchmark, the central bank for the currency of the benchmark, an insolvency official with jurisdiction over the administrator for the benchmark a resolution authority with jurisdiction over the administrator for the benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the benchmark has ceased or will cease to provide the benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the benchmark; or
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of the benchmark announcing that the benchmark is no longer representative.

The term "*compounded SOFR*" means the compounded average of SOFRs for the applicable corresponding tenor, with the rate, or methodology for this rate, and conventions for this rate (which will be compounded in arrears with an observation, lookback and/or suspension period as a mechanism to determine the interest payable prior to the end of each interest period) being established by the calculation agent in accordance with:

- (1) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the relevant governmental body for determining compounded SOFR; provided that:
- (2) if, and to the extent that, the calculation agent determines that compounded SOFR cannot be determined in accordance with clause (1) above, then the rate, or methodology for this rate, and conventions for this rate that have been selected by the calculation agent giving due consideration to any industry accepted market practice for U.S. dollar-denominated floating rate fixed income instruments at such time.

For the avoidance of doubt, the calculation of compounded SOFR shall exclude the benchmark replacement adjustment and the applicable margin of basis points.

The term "*corresponding tenor*" with respect to a benchmark replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current benchmark.

The term "*Federal Reserve Bank of New York's website*" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source. We are not incorporating by reference the website or any material it includes in this Base Prospectus.

The term "*interpolated benchmark*" with respect to the benchmark means the rate determined for the corresponding tenor by interpolating on a linear basis between: (1) the benchmark for the longest period (for which the benchmark is available) that is shorter than the corresponding tenor and (2) the benchmark for the shortest period (for which the benchmark is available) that is available) that is longer than the corresponding tenor.

The term "*ISDA definitions*" means the 2006 ISDA definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

The term "*ISDA fallback adjustment*" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA definitions to be determined upon the occurrence of an index cessation event with respect to the benchmark for the applicable tenor.

The term "*ISDA fallback rate*" means the rate that would apply for derivatives transactions referencing the ISDA definitions to be effective upon the occurrence of an index cessation date with respect to the benchmark for the applicable tenor excluding the applicable ISDA fallback adjustment.

The term "*reference time*" with respect to any determination of the benchmark means (1) if the benchmark is USD LIBOR, 11:00 a.m. (London time) on the relevant LIBOR interest determination date, and (2) if the benchmark is not USD LIBOR, the time determined by the calculation agent in accordance with the benchmark replacement conforming changes.

The term "*relevant governmental body*" with respect to SOFR means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

The term "**SOFR**" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's website.

The term "*term SOFR*" means the forward-looking term rate for the applicable corresponding tenor based on SOFR that has been selected or recommended by the relevant governmental body.

The term "*unadjusted benchmark replacement*" means the benchmark replacement excluding the benchmark replacement adjustment.

#### USD CMS Rate Notes

If you purchase a CMS rate note ("Base Rate": USD CMS), your note will bear interest at a base rate equal to the CMS rate and adjusted by the spread or spread multiplier, if any, specified in your final terms.

The CMS rate for the relevant interest reset date (the "CMS Rate") will be the rate appearing on the Reuters screen ICESWAP1 page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page) for U.S. dollar swaps having a maturity equal to the index maturity specified in the applicable final terms as of approximately 11:00 A.M., New York City time, on the relevant CMS interest determination date.

If the calculation agent determines, in its discretion and acting in good faith and in a commercially reasonable manner, that an original primary rate event has occurred in respect of the USD CMS Rate which may adversely affect the interest of holders (including but not limited to the fact that the USD CMS Rate, as the case may be, is no longer relevant to and does not reflect the original economic objective and rationale of the notes), then the calculation agent will select a replacement primary rate as described under "Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR notes and USD CMS Rate Notes" below.

If the rate described above does not so appear on the Reuters screen ICESWAP1 page (or if specified in your final terms, the underlyer screen page) (or any successor or replacement service or page), then unless the calculation agent determines that an original primary rate event and its related adjustment date have occurred, as provided in the preceding paragraph, the rate for such interest reset date will be determined by the Calculation Agent in its discretion, acting in good faith and in a commercially reasonable manner, on the basis of the relevant internally marked mid-rate (derived from externally executable bid and ask prices) of the Calculation Agent at 11:00 a.m., New York City time, on the relevant CMS interest determining the value of such rate.

# Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Rate Swap Notes, non-USD LIBOR Notes and USD CMS Rate Notes

If the calculation agent determines, with respect to EURIBOR Notes, Euro Interest Rate Swap Notes, non-USD LIBOR Notes or USD CMS Rate Notes, that an original primary rate event and its related adjustment date have occurred in respect of an original primary rate prior to the reference time in respect of any determination of the original primary rate on any date the replacement primary rate plus adjustment spread will replace the then-current original primary rate for all purposes relating to the EURIBOR Notes, Euro Interest Rate Swap Notes, non-USD LIBOR Notes or USD CMS Rate Notes, as the case may be, in respect of such determination on such date and all determinations on all subsequent dates. In connection with the implementation of the replacement primary rate, the calculation agent will have the right to make replacement primary rate amendments from time to time.

If the calculation agent determines, in its discretion and acting in good faith and in a commercially reasonable manner, that an original primary rate event has occurred in respect of an original primary rate which may adversely affect the interests of the holders (including but not limited to the fact that such original primary rate, as the case may be, is no longer relevant to and does not reflect the original economic objective and rationale of the notes):

- (1) the calculation agent shall attempt to identify a replacement primary rate, as the case may be;
- (2) the calculation agent shall attempt to determine the adjustment spread;
- (3) if the calculation agent identifies a replacement primary rate pursuant to paragraph
   (1) above and determines an Adjustment Spread pursuant to paragraph
   (2) above, then:

- (A) the terms of the notes shall, without the consent of the holders, be amended so that each reference to the original primary rate shall be replaced by a reference to "replacement primary rate plus the adjustment spread" (provided that the result of the replacement primary rate plus the adjustment spread plus or minus (as indicated in the relevant final terms) the margin, may not be less than zero) with effect from the adjustment date;
- (B) the calculation agent shall, without the consent of the holders, make such other adjustments (the "replacement primary rate amendments") to the conditions (including, but not limited to, any business day, business day convention, day count fraction, interest determination date, interest amount, interest payment date, interest period and rate of interest) with effect from the adjustment date as it determines necessary or appropriate in order to account for the effect of the replacement of the original primary rate with the replacement primary rate plus the adjustment spread and/or to preserve as nearly as practicable the economic equivalence of the notes before and after the replacement of the original primary rate with the replacement primary rate
- (C) the calculation agent shall deliver a notice to the holders as soon as practicable in the manner described under "— Notices" which shall specify any replacement primary rate, adjustment spread, adjustment date and the specific terms of any replacement primary rate amendments and such notice shall be irrevocable. Any replacement primary rate, adjustment spread and replacement primary rate amendments will be binding on the Issuer, the registrar, the paying and transfer agent and the holders.

Neither we, the calculation agent nor The Goldman Sachs Group, Inc. shall have any duty to monitor, enquire or satisfy itself as to whether any original primary rate event has occurred.

If the definition, methodology or formula for an original primary rate, or other means of calculating such original primary rate, is changed or modified (irrespective of the materiality of any such change or changes), then references to that original primary rate shall be to the original primary rate as changed and modified.

Defined terms used above:

The term "*adjustment date*" means, in respect of an original primary rate event, the later of:

- (1) the first date on which the calculation agent had identified a replacement primary rate and determined an adjustment spread, as applicable; and
- (2) the first to occur of: (A) the first date on which the original primary rate is no longer available following an original primary rate cessation, or (B) the administrator/benchmark event date, as relevant in relation to such original primary rate event;

The term "*adjustment spread*" means, in respect of a replacement primary rate, the adjustment, if any, to such replacement primary rate that the calculation agent determines, acting in good faith and in a commercially reasonable manner, is required in order to reduce or eliminate, to the extent reasonably practicable, any transfer of economic value from the Issuer to the holders (or vice versa) as a result of the replacement of the original primary rate with such replacement primary rate. Any such adjustment may take account of, without limitation, any transfer of economic value as a result of any difference in the term structure or tenor of the replacement primary rate by comparison to the original primary rate. The adjustment spread may be positive, negative or zero, or determined pursuant to a formula or methodology. If a spread or formula or methodology for calculating a spread has been formally designated, nominated or recommended by any relevant nominating body in relation to the replacement of the original primary rate with such replacement primary rate by comparison to the original primary rate. The adjustment spread may be positive, negative or zero, or determined pursuant to a formula or methodology. If a spread or formula or methodology for calculating a spread has been formally designated, nominated or recommended by any relevant nominating body in relation to the replacement of the original primary rate

to determine the adjustment spread (as the case may be), and such spread, formula or methodology (as the case may be) shall be adjusted as necessary to reflect the fact that the spread, formula or methodology (as the case may be) is used in the context of the notes. If the calculation agent is required to determine the adjustment spread, it shall consider the spread or formula or methodology for calculating a spread or payment (as applicable), that is, in the determination of the calculation agent, recognised or acknowledged as being the industry standard (or otherwise customarily widely adopted) for over-the-counter derivative transactions which reference such original primary rate.

The term "*administrator/benchmark event*" means the occurrence of a non-approval event, a rejection event or a suspension/withdrawal event, in each case being treated as having occurred on the administrator/benchmark event date.

The term "*administrator/benchmark event date*" means, in respect of an original primary rate, the date determined by the calculation agent to be:

- (1) in respect of a non-approval event, the date on which the relevant authorisation, registration, recognition, endorsement, equivalence decision, approval, inclusion in any official register or similar regulatory or legal requirement is required under any applicable law or regulation for the use of such original primary rate in respect of the notes;
- (2) in respect of a rejection event, the date on which following the rejection or refusal of the relevant application for authorisation, registration, recognition, endorsement, an equivalence decision, approval or inclusion in any official register, either GS Finance Corp., The Goldman Sachs Group, Inc. or the calculation agent is not, or will not be, permitted under any applicable law or regulation to use such original primary rate or to perform its or their respective obligations under the notes; and
- (3) in respect of a suspension/withdrawal event, the date on which following (A) the suspension or withdrawal by the relevant competent authority or other relevant official body of the authorisation, registration, recognition, endorsement, equivalence decision or approval, or (B) the date on which such original primary rate or the administrator or sponsor of such original primary rate is removed from the official register, as applicable, either GS Finance Corp., The Goldman Sachs Group, Inc. or the calculation agent is not, or will not be, permitted under any applicable law or regulation to use such original primary rate or to perform its or their respective obligations under the notes.

The term "*alternative post-nominated primary rate*" means, in respect of an original primary rate, any index, benchmark or other price source which is formally designated, nominated or recommended by:

- (1) any relevant nominating body; or
- (2) the administrator or sponsor of the original primary rate, provided that such index, benchmark or other price source is substantially the same as the original primary rate,

in each case, to replace such original primary rate. If a replacement index, benchmark or other price source is designated, nominated or recommended under both paragraphs (1) and (2) above, then the replacement index, benchmark or other price source designated, nominated or recommended under paragraph (1) shall be the alternative post-nominated primary rate.

The term "*non-approval event*" means, in respect of an original primary rate, the determination by the calculation agent that one or more of the following events has occurred:

 any authorisation, registration, recognition, endorsement, equivalence decision or approval in respect of such original primary rate or the administrator or sponsor of such original primary rate is not obtained;

- (2) such original primary rate or the administrator or sponsor of such original primary rate is not included in an official register; or
- (3) such original primary rate or the administrator or sponsor of such original primary rate does not fulfil any legal or regulatory requirement applicable to GS Finance Corp., The Goldman Sachs Group, Inc. or the calculation agent or such original primary rate,

in each case, with the effect that either GS Finance Corp., The Goldman Sachs Group, Inc. or the calculation agent is not, or will not be, permitted under any applicable law or regulation to use such original primary rate to perform its or their respective obligations under the notes, provided that a non-approval event shall not occur if such original primary rate or the administrator or sponsor of such original primary rate is not included in an official register because its authorisation, registration, recognition, endorsement, equivalence decision or approval is suspended if, at the time of such suspension, the continued provision and use of such original primary rate is permitted in respect of the notes under the applicable law or regulation.

The term "*original primary rate*" means, initially (1) EURIBOR with respect to EURIBOR Notes, (2) Euro Interest Swap Rate with respect to Euro Interest Swap Rate Notes, (3) LIBOR base rate with respect to non-USD LIBOR Notes, and (4) the USD CMS Rate with respect to USD CMS Rate Notes; provided, that if an original primary rate event and its related adjustment date have occurred with respect to EURIBOR, Euro Interest Swap Rate, non-USD LIBOR or the USD CMS Rate, as the case may be, the "original primary rate" means the applicable replacement primary rate plus adjustment spread.

The term "*original primary rate cessation*" means, in respect of an original primary rate, the determination by the calculation agent that one or more of the following events has occurred:

- (1) a public statement or publication of information by or on behalf of the administrator of such original primary rate announcing that it has ceased or will cease to provide such original primary rate permanently or indefinitely, provided that, at the time of such public statement or publication, there is no successor administrator that will continue to provide such original primary rate;
- (2) a public statement or publication of information by the supervisory authority of the administrator of such original primary rate, the central bank for the currency of such original primary rate, an insolvency official with jurisdiction over the administrator of such original primary pate, a resolution authority with jurisdiction over the administrator of such original primary rate or a court or an entity with similar insolvency or resolution authority over the administrator of such original primary rate or a court or an entity with similar insolvency or resolution authority over the administrator of such original primary rate announcing that the administrator has ceased or will cease to provide such original primary rate permanently or indefinitely, provided that, at the time of such public statement or publication, there is no successor administrator that will continue to provide such original primary rate; or
- (3) any event which otherwise constitutes an "index cessation event" (regardless of how it is actually defined or described in the definition of such Original Primary Rate in the 2006 Definitions) in relation to which the priority fallback(s) specified (if any) fail to provide appropriate means of determining the rate of interest,

provided that, in each case, an original primary rate cessation shall only occur if the first day on which such original primary rate is no longer available falls on or before the maturity date.

The term "*original primary rate event*" means, in respect of an original primary rate, the determination by the calculation agent that one or more of the following events has occurred:

- (1) an original primary rate cessation; and
- (2) an administrator/benchmark event.

The term "*priority fallback*" means, in respect of an original primary rate, if the definition of such original primary rate includes a reference to a concept defined or otherwise described as an "index cessation event" (regardless of the contents of that definition or description), any fallback specified in that definition or description to apply following the occurrence of such an event.

The term "*rejection event*" means, in respect of an original primary rate, the determination by the calculation agent that the relevant competent authority or other relevant official body has rejected or refused any application for authorisation, registration, recognition, endorsement, an equivalence decision, approval or inclusion in any official register in relation to such original primary rate or the administrator or sponsor of such original primary rate, with the effect that either GS Finance Corp., The Goldman Sachs Group, Inc. or the calculation agent is not, or will not be, permitted under any applicable law or regulation to use such original primary rate to perform its or their respective obligations under the notes.

The term "*relevant nominating body*" means, in respect of an original primary rate:

- (1) the central bank for the currency in which such original primary rate is denominated or any central bank or other supervisory authority which is responsible for supervising such original primary rate or the administrator of such original primary rate; or
- (2) any working group or committee officially endorsed or convened by (A) the central bank for the currency in which such original primary rate is denominated, (B) any central bank or other supervisory authority which is responsible for supervising such original primary rate or the administrator of such original primary rate, (C) a group of those central banks or other supervisory authorities, or (D) the Financial Stability Board or any part thereof.

The term "*replacement primary rate*" means, in respect of an original primary rate, the alternative post-nominated primary rate, provided that if more than one relevant nominating body formally designates, nominates or recommends an alternative post-nominated primary rate, and those designations, nominations or recommendations are not the same, then the calculation agent shall select the alternative post-nominated primary rate in its discretion, acting in good faith and in a commercially reasonable manner.

If the calculation agent determines that (A) there is no alternative post-nominated primary rate, or (B) the alternative post-nominated primary rate is not a suitable replacement for the original primary rate and/or the replacement of the original primary rate with the alternative post-nominated primary rate will not achieve a commercially reasonable result, the replacement primary rate shall be such other rate, index, benchmark or other price source selected by the calculation agent, in its discretion, acting in good faith and in a commercially reasonable manner. If the calculation agent is required to select the replacement primary rate as a result of there being no alternative post-nominated primary rate, it may take into account the rate that is, in the determination of the calculation agent, recognised or acknowledged as being the industry standard (or otherwise customarily widely adopted) replacement rate for over-the-counter derivative transactions which reference such original primary rate.

The term "*suspension/withdrawal event*" means, in respect of an original primary rate, the determination by the calculation agent that one or more of the following events has occurred:

- (1) the relevant competent authority or other relevant official body suspends or withdraws any authorisation, registration, recognition, endorsement, equivalence decision or approval in relation to such original primary rate or the administrator or sponsor of such original primary rate; or
- (2) such original primary rate or the administrator or sponsor of such original primary rate is removed from any official register,

in each case, with the effect that either GS Finance Corp., The Goldman Sachs Group, Inc. or the calculation agent is not, or will not be, permitted under any applicable law or regulation to use such

original primary rate to perform its or their respective obligations under the notes, provided that a suspension/withdrawal event shall not occur if such authorisation, registration, recognition, endorsement, equivalence decision or approval is suspended or where inclusion in any official register is withdrawn if, at the time of such suspension or withdrawal, the continued provision and use of such original primary rate is permitted in respect of the notes under the applicable law or regulation.

## Screen Rate Determination

If your final terms specify "Base Rate" to be "Screen Rate Determination" your note will bear interest at a base rate equal to an applicable reference rate specified in your final terms and adjusted by the spread or spread multiplier, if any, specified in your final terms.

The calculation agent will determine the applicable reference rate which appears on the underlyer screen page specified in your final terms (or any successor or replacement service or page) as of the **relevant time** specified in your final terms on the relevant interest determination date specified in your final terms.

If such rate does not appear on at least one of the underlyer screen pages at the relevant time on the relevant interest determination date, the calculation agent will: (a) request the principal financial center office of each of the **reference banks** to provide a quotation of the applicable reference rate at approximately the relevant time on the interest determination date to prime banks in the principal financial center interbank market in an amount that is representative for a single transaction in that market at that time; and (b) determine the arithmetic mean of such quotations, and the base rate with respect to such interest payment date shall be equal to such arithmetic mean.

If fewer than two such quotations are provided as requested, the calculation agent will determine the arithmetic mean of the rates (being the nearest to the applicable reference rate, as determined by the calculation agent) quoted by major banks in the principal financial center of the specified currency, selected by the calculation agent, at approximately 11:00 a.m. (local time in the principal financial center of the specified currency) (or such other relevant time) on the first day of the relevant interest period for loans in the specified currency to leading European banks for a period equal to the relevant interest period and in an amount that is representative for a single transaction in that market at that time, and the base rate with respect to such interest payment date shall be equal to such arithmetic mean.

If the calculation agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any interest period, the base rate applicable to your notes during such interest period shall be determined by the calculation agent in good faith and in a commercially reasonable manner having regard to comparable benchmarks then available.

# Special Rate Calculation Terms

In this subsection entitled "— Interest Rates — Floating Rate Notes", we use several terms that have special meanings relevant to calculating floating interest rates. We define these terms as follows:

The term "*Bloomberg page*" means, in respect of an applicable reference rate and any designated page, the display page so designated on the Bloomberg® service (or such other page as may replace that page on that service (or replace such services) for the purpose of displaying a rate comparable to such applicable reference rate, as determined by the calculation agent).

The term "*euro-zone*" means, at any time, the region comprised of the Member States of the European Economic and Monetary Union, or any successor union that, as of that time, have adopted a single currency in accordance with the Treaty on European Union of February 1992, or any successor treaty.

The term "*relevant time*" means the time in the place specified as such in the relevant final terms.

The term "*underlyer currency*" means, with respect to a LIBOR note, the currency specified as such in the applicable final terms. The underlyer currency may be U.S. dollars or any other currency and will be U.S. dollars unless another currency is specified in the applicable final terms.

The term "*underlyer maturity*" means, with respect to a floating rate note, the period to maturity of the instrument or obligation on which the interest rate formula is based, as specified in the applicable final terms.

The term "*underlyer screen page*" or "*underlyer screen pages*" means the Bloomberg Page or the Reuters Screen (or both) specified as the relevant screen page or the relevant screen pages in the relevant final terms;

The term "*principal financial center*" means the city specified as such in the relevant final terms.

The term "*reference banks*" means four major banks selected by the calculation agent in the market that is most closely connected with the reference rate.

The term *"representative amount"* means an amount that, in the calculation agent's judgment, is representative of a single transaction in the relevant market at the relevant time.

"*Reuters screen*" means the display on the Reuters 3000 Xtra service or any successor or replacement service, on the page or pages specified in the applicable final terms, or any replacement page or pages on that service, as determined by the calculation agent.

If, when we refer to any Reuters screen page or underlyer screen page, we refer to a particular heading or headings on such page, those references include any successor or replacement heading or headings as determined by the calculation agent.

#### Indexed Notes

This subsection provides information that may be relevant to your note if it is linked to an underlyer. The applicable final terms will provide any additional information necessary to complete the information provided below. In addition, the applicable final terms will contain disclosure with respect to any licensing arrangements we may enter into with the relevant underlyer sponsor. We do not intend to provide post-issuance information with respect to any underlyer, unless otherwise required by applicable laws and regulations.

Historical levels for the underlyer or underlyers of an indexed note are not indicative of future levels. If we issue an indexed note, we may cross-reference to historical information about the relevant underlyer or underlyers in the applicable final terms. Any information about underlyers that we may reference will be furnished as a matter of information only, and you should note that historical underlyer levels, fluctuations and trends are not necessarily indicative of future underlyer levels. Any historical upward or downward trend in underlyer levels is not an indication that the levels of the underlyer or underlyers are more or less likely to increase or decrease at any time during the life of an indexed note, and you should not take historical underlyer levels as an indication of future performance.

A note of this type will bear interest, if any, at rates that are determined by reference to one of the interest rate formulae described below or another rate as specified in your final terms. In some cases, the rates may be adjusted by adding or subtracting a spread or multiplying by a spread multiplier and may be subject to a minimum rate or a maximum rate, or to other provisions, as described in greater detail below. If your note is an indexed note, the inputs to the formula set out below, and any adjustments that apply to the interest rate, will be specified in your final terms.

Each indexed note will bear interest, if any, from its original issue date or from the most recent interest payment date. Interest, if any, will accrue on the principal of an indexed note at the annual rate determined according to the interest rate formula stated in the note and the applicable final terms, until the

principal is paid or made available for payment. We will pay interest, if any, on each interest payment date and at maturity as described under "— Payment Mechanics for Notes" below.

Whether or not a maximum rate applies, the interest rate on an indexed note will in no event be higher than the maximum rate permitted by New York law, as it may be modified by U.S. law of general application. Under current New York law, the maximum rate of interest, with some exceptions, for any loan in an amount less than \$2,500,000 is 25% per year on a simple interest basis. No limits apply to loans of \$2,500,000 or more.

#### Underlyers

We may issue indexed notes linked to one or more of the following underlyers, as specified in your final terms:

- a Base Rate (as defined above in "— Interest Rates Floating Rate Notes")
- a stock index
- a foreign currency exchange rate (as defined below in "— Currencies and Foreign Currency Exchange Rates"
- an inflation index or other consumer price index

If your indexed note is linked to a Base Rate, references to an "interest reset date" or "interest reset dates" contained in the section "— Interest Rates — Floating Rate Notes — Base Rates" shall be deemed to refer to the "Averaging Date", "Initial Averaging Date", "Initial Observation Date", "Final Observation Date", "Valuation Date" or "Initial Valuation Date", as applicable.

We will not issue any indexed notes composed by The Goldman Sachs Group, Inc. or any subsidiary.

## Currencies and Foreign Currency Exchange Rates

An underlyer may be a foreign currency exchange rate, in which case the "Underlyer" will be specified in the following format in the applicable final terms "[*ccy1*][*ccy2*] FX Fixing".

When specified in this format, each of "ccy1" and "ccy2" will be one of the following currencies, or another currency which we have not decided on as of the date of this base prospectus:

- "AUD" which is Australian dollar
- "USD" which is U.S. dollar
- "NZD" which is New Zealand dollar
- "INR" which Indian rupee
- "SGD" with is Singapore dollar
- "TWD" which is Taiwanese dollar
- "EUR" which is euro
- "GBP" which is Pounds sterling
- "JPY" which is Japanese yen
- "CHF" which is Swiss franc

The rate of a foreign currency exchange rate on any underlyer daily fixing date will be the rate expressed as the number of "ccy2" for which one "ccy1" could be purchased. The calculation agent will determine the rate as the rate that appears on the "Fixing Page" specified in the final terms (or any successor or replacement service or page) at the "Fixing Time" specified in the final terms on such underlyer daily fixing date. If "bid" or "ask" is specified in the "Bid/Ask/Mid" column in the applicable final terms, the applicable rate will be the one that appears under the "bid" or "ask" column, respectively, on the "Fixing Page" specified in the final terms (or any successor or replacement service or page). If "mid" is specified in the "Bid/Ask/Mid" column in the applicable final terms, the applicable rate will be the average of the rates that appear under the "bid" or "ask" columns on the "Fixing Page" specified in the final terms (or any successor or replacement service or page). If "mid" is specified in the "Bid/Ask/Mid" column in the applicable final terms, the applicable rate will be calculated by the Calculation Agent as the average of the rates that appear under the "bid" or "ask" columns on the "Fixing Page" specified in the final terms (or any successor or replacement service or page). In the event the Calculation Agent determines that on any underlyer daily fixing date the "Fixing Page" specified in the final terms (or any successor or replacement service or page). In the final terms is no longer published and no replacement symbol or page is designated, or is not published as of the designated date and time, or the applicable rate does not appear on the "Fixing Page" specified in the final terms, the Calculation Agent will determine the rate of the applicable exchange rate underlyer in its sole discretion.

#### Interest Rate Formulae

#### Range Accrual Notes

If "Range Accrual Provisions" is specified as Applicable in the applicable final terms in respect of one or more interest periods, this section shall apply to your notes.

Interest will accrue on each Underlyer Daily Fixing Date on a Range Accrual Note at the Interest Rate specified in the applicable final terms, provided that the level of the Underlyer Daily Fixing, or each Underlyer Daily Fixing, as the case may be, on such day falls within the accrual range applicable to each relevant underlyer. Interest payments on a Range Accrual Note will be subject to range accrual on one or more Underlyers, such Underlyers to be any of the Underlyers described above. The "Accrual Range" and "Underlyer Daily Fixing" for each "Underlyer" will be specified in your final terms.

The interest periods are the period from and including an interest payment date (or the interest commencement date, in the case of the initial interest periods) to but excluding the next succeeding interest payment date (or the stated maturity date, in the case of the final interest periods). Interest on the notes if any, will accrue on each calendar day, from and including each originally scheduled interest payment date (or the interest commencement date, in the case of the initial interest periods) to but excluding the next succeeding originally scheduled interest payment date (or the originally scheduled interest payment date, in the case of the final interest periods) to but excluding the next succeeding originally scheduled interest payment date (or the originally scheduled stated maturity date, in the case of the final interest periods) and be paid on each interest payment date provided that the level of "Underlyer Daily Fixing" (as specified in the Final Terms) on the relevant underlyer daily fixing date falls within the "Accrual Range" applicable to the relevant underlyer (as specified in the Final Terms and subject to the rate cut-off described below); otherwise no interest will accrue on such day.

The underlyer daily fixing dates are, with respect to each interest periods, each calendar day in such interest periods, (subject to the rate cut-off described below); provided that in the event that an underlyer daily fixing date falls on a day that is not a business day, the underlyer daily fixings on the immediately preceding day that is a business day shall be used.

The rate cut-off will occur on the date five (5) business days prior to the next succeeding originally scheduled interest payment date. The level of each underlyer daily fixing on the rate cut-off date will determine the level of the underlyer daily fixings for the relevant underlyer for the remaining calendar days of such interest periods, i.e., the underlyer daily fixing for each underlyer calculated five (5) business days prior to the next succeeding originally scheduled interest payment date will be the underlyer daily fixing for such underlyer for all calendar days remaining in such interest periods.

In this subsection entitled "Range Accrual Notes", we use several terms that have special meanings relevant to range accrual notes. We define these terms as follows:

The term "*currency exchange rate*" means any foreign currency exchange rate defined above that is specified as an "underlyer" in the applicable final terms.

The term "*underlyer*" means underlyer as described above under "Indexed Notes—Underlyers" specified as such in the applicable final terms.

When "*daily range accrual*" is specified in your final terms, interest on the notes will accrue on each day at the interest rate (or rates, if different interest rates apply in different interest periods) specified in the final terms, from and including the interest commencement date to but excluding the originally scheduled maturity date unless the notes are redeemed early pursuant to an early redemption feature of the notes, provided that the level of each underlyer daily fixing on the relevant underlyer daily fixing date falls within the accrual range applicable to the relevant underlyer, subject to, if applicable, the rate cut-off; otherwise no interest will accrue on such day.

The term "*accrual range*" means, with respect to an underlyer, all values of the underlyer *greater* or *less* than, as applicable, and, if specified, *equal* to a specified value, *or*, if the accrual range of the underlyer has both upper and lower boundaries, all values of the underlyer that are both (i) *greater* than and, if specified, *equal* to a specified lower boundary underlyer value and (ii) *less* than and, if specified, *equal* to a specified upper boundary underlyer value.

The term "*rate cut-off date*" means, with respect to each interest periods, the date that falls five Business Days prior to the next succeeding originally scheduled interest payment date.

With respect to each interest periods, during the period from and including the relevant "*rate cut-off date*" to but excluding the next succeeding originally scheduled interest payment date, the level of each underlyer daily fixing (as defined below) on the rate cut-off date will determine the level of the underlyer daily fixing for the relevant underlyer for the remaining calendar days of such interest periods, *i.e.*, the underlyer daily fixing for each underlyer calculated on the relevant rate cut-off date will be the underlyer daily fixing for such underlyer for all calendar days remaining in the relevant interest periods.

The term "*underlyer daily fixing date*" means, with respect to an interest periods, each calendar day in such interest periods, subject to rate cut-off.

The term "*underlyer daily fixings*" means, with respect to an underlyer, the reference price of the underlyer on the applicable underlyer daily fixing date.

#### Steepener and Flattener Notes

If your final terms specify that "Steepener / Flattener" is Applicable for any interest period, the final terms will also specify a Base Rate 1, a Base Rate 2 and one or more of a Participation Rate, Cap Level, Floor Level, whether "Worst-Of Steepener" is Applicable or Not Applicable, and if "Worst-Of Steepener" is Applicable, a Comparison Base Rate.

If "Worst-Of Steepener" is specified in your final terms as Not Applicable, for each applicable Interest Period indicated in your final terms, your note will bear interest at a rate per annum equal to the Participation Rate *times* the *difference between* (x) the Base Rate 1 *multiplied by* the Base Rate 1 Multiplier (if any) *minus* (y) the Base Rate 2 *multiplied by* the Base Rate 2 Multiplier (if any), subject to the Minimum Rate and/or Maximum rate (if any) specified in your final terms. Each of Base Rate 1 and Base Rate 2 will be one of the floating rates specified under "— Interest Rates — Floating Rate Notes", and the rate of interest for each will be determined as set forth therein. For the avoidance of doubt, the interest rate per annum in respect of each applicable interest period will be calculated according to the following formula, subject to the Minimum Rate and/or Maximum (if any) specified in your final terms:

Participation Rate  $\times$  (Base Rate<sub>1</sub>  $\times$  BR<sub>1</sub>Multiplier – Base Rate<sub>2</sub>  $\times$  BR<sub>2</sub>Multiplier )+ Spread

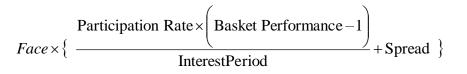
If "Worst-Of Steepener" is specified in your final terms as Applicable, for each applicable Interest Period indicated in your final terms, your note will bear interest at a rate per annum equal to the *lower of* (A) the Comparison Base Rate *times* the Comparison Base Rate Multiplier *plus* the Comparison Base Rate Spread *and* (B) the Participation Rate *times* the *difference between* (x) the Base Rate 1 *multiplied by* the Base Rate 1 Multiplier (if any) *minus* (y) the Base Rate 2 *multiplied by* the Base Rate 2 Multiplier (if any), subject to the Minimum Rate and/or Maximum rate (if any) specified in your final terms. Each of the Comparison Base Rate, Base Rate 1 and Base Rate 2 will be one of the floating rates specified under "— Interest Rates — Floating Rate Notes", and the rate of interest for each will be determined as set forth therein. For the avoidance of doubt, the interest rate per annum in respect of each applicable interest period will be calculated according to the following formula, subject to the Minimum Rate and/or Maximum (if any) specified in your final terms:

 $Min \begin{cases} Comparison Base Rate \times Comparison Base Rate Multiplier + Comparison Base Rate Spread, \\ Participation Rate \times (Base Rate_1 \times BR_1 Multiplier - Base Rate_2 \times BR_2 Multiplier) + Spread \end{cases}$ 

# Asian Performance Notes

If your final terms specify that "Asian Performance" is Applicable for any interest payment date, the final terms will also specify in the "Index Information Table" one or more indices and Weightings (which may be 100%) that apply to each Index and whether "Absolute" is Applicable or Note Applicable.

If Absolute is specified in your final terms to be Not Applicable, on each applicable Interest Payment Date listed in the "Interest Rate Table", your note will pay a coupon in amount equal to the (a) face amount of your notes *multiplied by* (b) the *sum* of (i) the *quotient* of (x) the Participation Rate specified in your final terms *multiplied by* the *difference between* (aa) the Basket Performance determined in respect of that Interest Payment Date *minus* (bb) one *divided by* (y) the Interest Period Number corresponding to such Interest Payment Date listed in the "Interest Rate Table" *plus* (ii) the Spread specified in your Final Terms, if any, (which may be positive or negative), as determined by the calculation agent, subject to the Minimum Rate and/or Maximum Rate (if any) specified in your final terms. For the avoidance of doubt, the coupon payable in respect of any interest period will be calculated according to the following formula:



If Absolute is specified in your final terms to be Applicable, on each applicable Interest Payment Date listed in the "Interest Rate Table", your note will pay a coupon in amount equal to (a) face amount of your notes *multiplied by* (b) the *sum* of (i) the *quotient* of (x) the Participation Rate specified in your final terms *multiplied by* the *absolute value* of the *difference between* (aa) the Basket Performance determined in respect of that Interest Payment Date *minus* (bb) one *divided by* (y) the Interest Period Number corresponding to such Interest Payment Date listed in the "Interest Rate Table" *plus* (ii) the Spread specified in your Final Terms, if any, (which may be positive or negative), as determined by the calculation agent, subject to the Minimum Rate and/or Maximum Rate (if any) specified in your final terms. The absolute value of a number is (i) if the number is zero or positive, the number and (ii) if the number is negative, the number multiplied by -1. For the avoidance of doubt, the coupon payable in respect of any interest period will be calculated according to the following formula:

$$Face \times \left\{ \begin{array}{c} \frac{\text{Participation Rate} \times \left| \left( \text{Basket Performance} - 1 \right) \right|}{\text{InterestPeriod}} + \text{Spread} \right. \right\}$$

where vertical lines in the formula mean to take the absolute value of the amount between the vertical lines.

#### **Digital Notes**

If your final terms specify that "Digital" is Applicable for any interest period, the final terms will also specify in the "Index Information Table" one or more indices and Barrier Levels that apply to each Index. If your final terms specify that "Floating Coupon" is applicable for such interest period, subject to the Index Performance Condition, the interest rate for that period will be determined by reference to a base rate or an interest rate formula specified in your final terms; see "General Note Conditions — Interest Rates — Floating Rate Notes" for definitions of relevant base rates and other terms that may be used in the relevant interest rate formula.

If "Lock-In" is specified as "Not Applicable", for each applicable interest period, if the Digital Condition is met, your note will bear interest at the fixed or floating rate per annum specified in your final terms in the "Interest Rate Table" under the heading "Applicable Coupon" in the row with the corresponding Interest Payment Date; otherwise, your note will not bear interest for such Interest Period.

If "Lock-In" is specified as "Applicable", for each applicable interest period, if either (a) the Digital Condition or (b) the Lock-In Condition is met, your note will bear interest at the fixed or floating rate per annum specified in your final terms in the "Interest Rate Table" under the heading "Applicable Coupon" in the row with the corresponding Interest Payment Date; otherwise, your note will not bear interest for such Interest Period.

If "Worst-Of", "Worst-Of" and "Multiple Conditions" are specified as "Not Applicable", your final terms will specify only one Index, and for each relevant interest period, the Digital Condition will be met if the Index Performance Condition is met in respect of such Index for such interest period.

If "Worst-Of" is specified as "Applicable", your final terms will specify more than one Index, and for each relevant Interest Period, the Digital Condition will be met if and only if the Index Performance Condition is met in respect of the Worst Performing Index for such Interest Period.

If "Best-Of" is specified as "Applicable", your final terms will specify more than one Index, and for each relevant Interest Period, the Digital Condition will be met if and only if the Index Performance Condition is met in respect of the Best Performing Index for such Interest Period.

If "Multiple Conditions" is specified as "Applicable", your final terms will specify more than one Index, and for each relevant Interest Period, the Digital Condition will be met if and only if the Index Performance Condition is met in respect of each Index for such Interest Period.

If "Performance Measure" is specified as "Equal to or Greater Than" with respect to an Index in the Index Information Table, for each relevant Interest Period, the Index Performance Condition will be met in respect of such Index if the Index Performance of the Index is *equal to* or *greater than* the Barrier Level corresponding to that Index specified in the Index Information Table under "Barrier Level", as determined by the Calculation Agent.

If "Performance Measure" is specified as "Greater Than" with respect to an Index in the Index Information Table, for each relevant Interest Period, the Index Performance Condition will be met in respect of such Index if the Index Performance of the Index is *greater than* the Barrier Level corresponding to that Index specified in the Index Information Table under "Barrier Level", as determined by the Calculation Agent.

If "Performance Measure" is specified as "Equal to or Less Than" with respect to an Index in the Index Information Table, for each relevant Interest Period, the Index Performance Condition will be met in respect of such Index if the Index Performance of the Index is *equal to* or *less than*, the Barrier Level corresponding to that Index specified in the Index Information Table under "Barrier Level", as determined by the Calculation Agent.

If "Performance Measure" is specified as "Less Than" with respect to an Index in the Index Information Table, for each relevant Interest Period, the Index Performance Condition will be met in respect

of such Index if the Index Performance of the Index is *less than*, the Barrier Level corresponding to that Index specified in the Index Information Table under "Barrier Level", as determined by the Calculation Agent.

If "Interest Protection" is specified as "Applicable", for each applicable interest period, if the Digital Condition is met, you will receive the *sum of* (a) the interest payment payable in respect of such interest period, as described above *plus* (b) the Protection Amount.

The Lock-In Condition is met in respect of any Interest Period (or in respect of the Valuation Date with respect to the Amount Payable at Maturity (Final Redemption Amount)) if the Digital Condition was met for any prior Interest Period.

## OutPerformance Notes

If your final terms specify that "OutPerformance" is Applicable for any interest period, the final terms will also specify in the "Index Information Table" a Primary Index, a Secondary Index and a Performance Factor (which may be positive or negative). If your final terms specify that "Floating Coupon" is applicable for such interest period, subject to the OutPerformance Condition, the interest rate for that period will be determined by reference to a base rate or an interest rate formula specified in your final terms; see "General Note Conditions — Interest Rates — Floating Rate Notes" for definitions of relevant base rates and other terms that may be used in the relevant interest rate formula.

For any Interest Period, if the OutPerformance Condition is met, your note will bear interest at the fixed rate or floating rate per annum specified in your final terms in the "Interest Rate Table" under the heading "Applicable Coupon" in the row with the corresponding Interest Payment Date; otherwise, your note will not bear interest for such Interest Period.

For each relevant Interest Period, the OutPerformance Condition will be met in an applicable Interest Period if the Index Performance of the Primary Index is *equal to* or *greater than*, the *sum of* (x) the Index Performance of the Secondary Index *plus* (y) the Performance Factor (which may be positive or negative), as determined by the Calculation Agent.

## **UDI-Linked Notes**

If your final terms specify that "Interest Rate Note Provisions" is Applicable and "UDI-Linked" is Applicable for any interest period, then each UDI-linked note will bear interest from the "Interest Commencement Date" specified in your final terms or from the most recent interest payment date to which interest on the note has been paid or made available for payment.

Your note will bear interest at an amount equal to the product of (i) a fixed rate per annum, or at fixed rates per annum, stated in applicable final terms as the "Interest Rate" *times* (ii) the UDI-Linked Notional Amount *times* (iii) the UDI Index Level for the relevant interest determination date. The terms "UDI-Linked Notional Amount" and "UDI Index Level" shall have the meanings set forth under "– Redemption and Repayment – Redemption at Maturity – UDI-Linked Notes" below

The interest amount payable on an interest payment date with respect to an interest period will be determined by the calculation agent by reference to a particular date called an interest determination date. The interest determination dates applicable to each interest period will be specified as the "Interest Determination Dates" in the applicable final terms. If any interest determination date would otherwise be a day that is not a business day, the interest determination date will be adjusted in accordance with the applicable business day convention. The interest period for each payment of interest due on an interest payment date or at maturity will include interest accrued from and including the last date to which interest has been paid or made available for payment, or from the interest payment date, the date of maturity or the relevant early redemption date, in each case subject to the business day convention. We will compute interest on UDI-linked notes on the basis of the day count convention specified in your final terms; see "—

Day Count Conventions" above. We will pay interest on each interest payment date and at maturity as described under "— Payment Mechanics for Notes" below.

#### Indexed Notes Terms

In this subsection entitled "Indexed Notes" and elsewhere in this Base Prospectus, we use several terms that have special meanings relevant to indexed notes. We define these terms as follows:

Affected Observation Date has the meaning given thereto in "- Inflation Indices - Delay in Publication".

**Averaging Dates** means, if Averaging is "Applicable", in respect of each Payment Date, the dates specified as Average Dates, or each of the dates specified under the heading "Observation Dates" in the relevant Interest Rate Table relating to such Payment Date, as applicable, in the relevant Final Terms, subject to adjustment (as an Averaging Observation Date) as described under "Stock Indices — Adjustments — Averaging Observation Dates".

**Base Level** means the level of the Inflation Index (excluding any "flash" estimates) published or announced by the Inflation Index Sponsor in respect of the month which is 12 calendar months prior to the month for which the Substitute Level is being determined.

**Basket Performance** means the aggregate of the Weighted Performance of each Index in the Index Basket.

**Best Performing Index** means the Index with the highest Index Performance, as determined by the Calculation Agent. In the event that two or more Indexes have the same highest Index Performance, then the Calculation Agent shall determine in its sole and absolute discretion which of such Indexes shall be the Best Performing Index, and such Index as so selected shall be deemed the Best Performing Index.

**BR Multiplier** means the percentage as specified in the relevant Final Terms.

**Fallback Bond** means, for any Inflation Index, the bond selected by the Calculation Agent and issued by the government of the country to whose level of inflation the Inflation Index relates and which pays a coupon or redemption amount which is calculated by reference to the Inflation Index, with a maturity date which falls on (a) the same day as the Maturity Date, (b) the next longest maturity after the Maturity Date if there is no such bond maturing on the Maturity Date, or (c) the next shortest maturity before the Maturity Date if no bond defined in (a) or (b) is selected by the Calculation Agent. The Calculation Agent will select the Fallback Bond from those inflation-linked bonds issued on or before the Issue Date and, if there is more than one inflation-linked bond maturing on the same date, the Fallback Bond shall be selected by the Calculation Agent from those bonds. If the Fallback Bond redeems, the Calculation Agent will select a new Fallback Bond on the same basis, but selected from all eligible bonds in issue at the time the original Fallback Bond redeems (including any bond for which the redeemed bond is exchanged).

**Final Observation Dates** means, if Final Observation Period is "Applicable", each date specified as such in your Final Terms, subject to adjustment (as an Observation Date) as described under "Stock Indices — Adjustments".

**Index** means each Index specified in the relevant Final Terms and any successor Index, in each case as it may be modified, replaced or adjusted from time to time, as determined by the Calculation Agent.

**Index Currency** means, in respect of an Index, the currency specified as such in the relevant Final Terms, or if not specified, the currency which the relevant level of the Index is reported or published as determined by the Calculation Agent, if applicable.

**Index Performance** means an amount equal to Reference Price (Final) *divided by* Reference Price (Initial).

**Index Sponsor** means, for each Index, the entity specified in the relevant Final Terms, and, if not specified, the corporation or other entity that, as determined by the Calculation Agent, (i) is responsible for setting and reviewing the rules and procedures and the methods of calculation and adjustments, if any, related to such Index, and (ii) announces (directly or through an agent) the level of such Index on a regular basis during each Scheduled Trading Day.

**Index Valuation Time** means the time in the place as specified in the relevant Final Terms.

**Inflation Index** and **Inflation Indices** mean, subject to adjustment as described in "Inflation Indices" below, the inflation index or indices specified in the relevant Final Terms, and related expressions shall be construed accordingly.

**Inflation Index Sponsor** means, for any Inflation Index, the entity specified in the relevant Final Terms, and, if not specified, the corporation, governmental agency or other entity that, as determined by the Calculation Agent, publishes or announces (directly or through an agent) the level of such Inflation Index.

**Initial Averaging Dates** means, if Averaging is "Applicable", each date specified as such in your Final Terms, subject to adjustment (as a Averaging Observation Date) as described under " — Stock Indices — Adjustments — Averaging Observation Date".

**Initial Observation Dates** means, if Initial Observation Period is "Applicable", each date specified as such in your Final Terms, subject to adjustment (as an Observation Date) as described under "Stock Indices — Adjustments".

**Initial Valuation Date** means, if Averaging is "Not Applicable", the date specified as such in your Final Terms, subject to adjustment (as an Observation Date) as described under "Stock Indices — Adjustments".

**Latest Level** means the latest level of the Inflation Index (excluding any "flash" estimates) published or announced by the Inflation Index Sponsor prior to the month in respect of which the Substitute Level is being calculated.

**Observation Date** means each Averaging Date, each Initial Averaging Date, each Initial Observation Date, each Final Observation Date, each Observation Date, each Valuation Date and the Initial Valuation Date, as applicable, as specified in the applicable final terms, subject to any relevant adjustments described herein.

**Participation Rate** means the percentage as specified in the relevant Final Terms.

**Payment Date** means each Interest Payment Date and the Maturity Date, as applicable.

**Protection Amount** means, in respect of any interest period for an Indexed (Digital) note, the *sum* of any interest payment(s) that would have been payable in respect of any preceding interest period(s) but for the fact that the Digital Condition was not met in respect of such interest periods and were not so paid (each such payment, a "Catch-Up Payment"); *provided that* once a Catch-Up Payment has been paid in respect of any interest period, no further payments will be made in respect of such interest period.

**Rebased Inflation Index** has the meaning given thereto in "— Inflation Indices — Rebasing of Inflation Index".

**Reference Index Level** means, in respect of an Index and any relevant day, the official closing level of the Index or, if an Index Valuation Time other than "closing" is specified with respect to a relevant Index in your Final Terms, the level of such Index as at the specified Index Valuation Time on such relevant day as calculated and published by the Index Sponsor (in each case, expressed in the relevant Index Currency (if specified in the relevant Final Terms) applicable to the Index), as determined by the Calculation Agent.

**Reference Month** means the specified calendar month for which the level of the Inflation Index was reported, regardless of when such information is published or announced (subject as provided in "— Inflation Indices — Delay in Publication"). If the period for which the level of the Inflation Index was reported is a period other than a month, the Reference Month is the period for which the level - 25 of the Inflation Index was reported (as determined by the Calculation Agent).

**Reference Price** means the official closing level of the relevant underlyer as of the relevant observation date as published by the underlyer sponsor.

**Reference Price (Final)** means, in respect of each applicable Payment Date:

- if your final terms specify "Averaging" and "Final Observation Period" to be Not Applicable in respect of such Payment Date, the Reference Index Level of the Index on the Valuation Date corresponding to such Payment Date
- if your final terms specify "Averaging" to be Applicable in respect of such Payment Date, the arithmetic mean of the Reference Index Levels of the Index on each of the Averaging Dates corresponding to such Payment Date, as determined by the Calculation Agent
- if your final terms specify "Final Observation Period" to be Applicable and "Observation Level" to be "Lowest" in respect of such Payment Date, the lowest Reference Index Level of the Index observed on the Final Observation Dates corresponding to such Payment Date, as determined by the Calculation Agent
- if your final terms specify "Final Observation Period" to be Applicable and "Observation Level" to be "Highest" in respect of such Payment Date, the highest Reference Index Level of the Index observed on the Final Observation Dates corresponding to such Payment Date, as determined by the Calculation Agent

## Reference Price (Initial) means:

- if your final terms provides a number, the amount so specified
- if your final terms specify "Initial Reference Price", the Reference Index Level of the Index on the Initial Valuation Date
- if your final terms specify "Initial Average Price", the arithmetic mean of the Reference Index Levels of the Index on each of the Initial Averaging Dates, as determined by the Calculation Agent
- if your final terms specify "Initial Lowest Price", the lowest Reference Index Level of the Index observed on the specified Initial Observation Dates, as determined by the Calculation Agent
- if your final terms specify "Initial Highest Price", the highest Reference Index Level of the Index observed on the specified Initial Observation Dates, as determined by the Calculation Agent

**Related Bond** means, for any Inflation Index, the Fallback Bond.

**Related Bond Calculation agent** means, for any Related Bond, the calculation agent for such Related Bond, as determined by the Calculation Agent.

**Relevant Level** means, for any Inflation Index, any level of such Inflation Index for a Reference Month which is relevant for the calculation of a payment under the notes.

Substitute Level has the meaning given thereto in "- Inflation Indices - Delay in Publication".

**Successor Inflation Index** has the meaning given thereto in "— Inflation Indices — Cessation of Publication – Successor Index".

**Underlyer** means any underlyer specified as such in the applicable final terms and any successor underlyer, in each case as it may be modified, replaced or adjusted from time to time, as indicated above.

**Underlyer Sponsor** means, at any time, the person or other entity, including any successor sponsor, that is (i) responsible for setting and reviewing the rules and procedures for the methods of calculation and adjustments, if any, related to the relevant underlyer and (ii) announces (directly or through an agent) the level of the relevant underlyer on a regular basis on each exchange business day, all as determined by the calculation agent.

**Valuation Date** means, if Averaging and Final Observation Period are "Not Applicable", in respect of each Payment Date, the date specified as the Valuation Date, or the date specified under the heading "Observation Dates" in the relevant Interest Rate Table relating to such Payment Date, as applicable, subject to adjustment (as an Observation Date) as described under "Stock Indices — Adjustments".

**Weighted Performance** means, in respect of each Index in the Index Basket, an amount calculated by the Calculation Agent in accordance with the following formula:

Weighting  $\times \frac{\text{Reference Price (Final)}}{\text{Reference Price(Initial)}}$ 

**Weighting** means in the relevant "Index Information Table" set out in the Final Terms, in respect of each Index set forth in the Index Table in the column entitled "Index", the amount set forth in the column entitled "Weighting" in the row corresponding to such Index.

**Worst Performing Index** means the Index with the lowest Index Performance, as determined by the Calculation Agent. In the event that two or more Indexes have the same lowest Index Performance, then the Calculation Agent shall determine in its sole and absolute discretion which of such Indexes shall be the Worst Performing Index, and such Index as so selected shall be deemed the Worst Performing Index.

## Inflation Indices

## Delay in Publication

Subject to the section below ("— Cessation of Publication – Successor Inflation Index"), if any Relevant Level in respect of any Observation Date (the "Affected Observation Date") has not been published or announced by the Affected Observation Date, the Calculation Agent shall determine a substitute level ("Substitute Level") by using the following methodology:

(a) if applicable, the Calculation Agent will take the same action to determine the Substitute Level for the Affected Observation Date as that taken by the Related Bond Calculation Agent pursuant to the terms and conditions of the Related Bond (if any); and

(b) if (a) does not result in a Substitute Level for the Affected Observation Date for any reason, then the Calculation Agent shall determine the Substitute Level as the product of (i) the Base Level and (ii) the quotient of the Latest Level divided by the Reference Level.

If a Relevant Level is published or announced at any time after the Affected Observation Date, such Relevant Level will not be used in any calculations in respect of such Affected Observation Date. The Substitute Level so determined pursuant to this section "— Delay in Publication" will be the definitive level of the Inflation Index for that Reference Month (subject to "— Cessation of Publication – Successor Inflation Index" below).

## Cessation of Publication – Successor Inflation Index

If (a) a level of the Inflation Index (whether or not used for any calculation on an Observation Date) has not been published or announced for a period of two consecutive months or (b) the Inflation Index Sponsor announces that it will no longer continue to publish or announce the Inflation Index, then, in each case, the Calculation Agent shall determine a successor inflation index (the "Successor Inflation Index") (in lieu of any previously applicable Inflation Index) for an Observation Date for the purpose of the notes by using the following methodology:

(i) if at any time a successor index has been designated by the Related Bond Calculation Agent pursuant to the terms and conditions of the Related Bond (if applicable), such successor index shall be deemed a "Successor Inflation Index" for the purposes of such Observation Date and all subsequent Observation Dates in relation to the notes, notwithstanding that any other Successor Inflation Index may previously have been determined under (ii), (iii) or (iv) below; or

(ii) if a Successor Inflation Index has not been determined under (i) above, and a notice has been given or an announcement has been made by an Inflation Index Sponsor, specifying that the Inflation Index will be superseded by a replacement inflation index specified by the Inflation Index Sponsor, and the Calculation Agent determines that such replacement inflation index is calculated using the same or substantially similar formula or method of calculation as used in the calculation of the previously applicable Inflation Index, then such replacement inflation index shall be deemed the Successor Inflation Index from the date that such replacement Inflation Index comes into effect; or

(iii) if a Successor Inflation Index has not been determined under (i) or (ii) above, the Calculation Agent shall ask five leading independent dealers to state what the replacement inflation index for the Inflation Index should be. If between four and five responses are received, and of those four or five responses, three or more leading independent dealers state the same inflation index, that inflation index will be deemed the "Successor Inflation Index". If three responses are received, and two or more leading independent dealers state the same inflation index will be deemed the "Successor Inflation Index". If three responses are received, and two or more leading independent dealers state the same inflation index, that inflation index will be deemed the "Successor Inflation Index" in respect of the Securities from the date such inflation index is deemed the "Successor Inflation Index". If fewer than three responses are received, the "Successor Inflation Index" will be determined under (iv) below; or

(iv) if a Successor Inflation Index has not been determined under (i), (ii) or (iii) above by such Observation Date, the Calculation Agent will determine an appropriate alternative inflation index for such Observation Date, and such inflation index will be deemed a "Successor Inflation Index" (from the date, such inflation index is deemed to be the "Successor Inflation Index").

# Rebasing of Inflation Index

If the Calculation Agent determines that the Inflation Index has been or will be rebased at any time, the Inflation Index as so rebased (the "Rebased Inflation Index") will be used for purposes of determining the level of the Inflation Index from the date of such rebasing; provided, however, that the Calculation Agent shall make adjustments as are made by the Related Bond Calculation Agent pursuant to the terms and conditions of the Related Bond, if any, to the levels of the Rebased Inflation Index so that the Rebased Inflation Index levels reflect the same rate of inflation as the Inflation Index before it was rebased. If there is no Related Bond, the Calculation Agent shall make adjustments to the Rebased Inflation Index so that the Rebased Inflation Index so that the Rebased Inflation Index so that the Rebased Inflation Index levels reflect the same rate of inflation as the Inflation as the Inflation Index before it was rebased. Any such rebasing shall not affect any prior payments made under the Securities.

# Material Modification prior to Observation Date

In respect of each Observation Date, if, on or prior to such Observation Date, the Inflation Index Sponsor for the Inflation Index announces that it will make a material change to the Inflation Index then the Calculation Agent shall make any such adjustments to the Inflation Index consistent with adjustments made to the Related Bond, if any, or, if there is no Related Bond, only those adjustments necessary for the modified Inflation Index to continue as the Inflation Index. In addition, the Calculation Agent may, but shall not be obliged to, make such adjustments that it determines (in its sole and absolute discretion) to be appropriate to any variable, calculation methodology, valuation, settlement, payment terms or any other terms or conditions in respect of the notes.

## Manifest Error in Publication

In respect of each Observation Date, if, within 30 days of publication and in any event prior to such Observation Date, the Calculation Agent determines that the Inflation Index Sponsor has corrected the level of the Inflation Index to remedy a manifest error in its original publication, the Calculation Agent will determine the amount that is payable as a result of that correction and, to the extent necessary, will adjust any relevant terms of the Securities to account for any such correction.

# Stock Indices

# Exchange Business Days

An Exchange Business Day with respect to a stock Index will be any day with respect to which a Reference Price with respect to such Index is or, but for the occurrence of a Market Disruption Event, would have been published by the Underlyer Sponsor.

# Market Disruption Events

Any of the following will be a Market Disruption Event with respect to a stock Index:

- a suspension, absence or material limitation of trading in index components constituting 20% or more of the Index on their respective primary markets, in each case for more than two hours of trading or during the one hour before the close of trading in that market, as determined by the Calculation Agent in its sole discretion; or
- a suspension, absence or material limitation of trading in options or futures contracts relating to the Index or to index components constituting 20% or more, by weight, of the Index, if available, in the respective primary markets for those contracts, in each case for more than two hours of trading or during the one-half hour before the close of trading in that market, as determined by the calculation agent in its sole discretion; or
- index components constituting 20% or more, by weight, of the Index, or options or futures contracts relating to the Index or to index components constituting 20% or more, by weight, of the Index, if available, do not trade on what were the respective primary markets for those index components or contracts, as determined by the calculation agent in its sole discretion; or
- an unannounced closure of the primary markets relating to index components constituting 20% or more of the Index; or
- a material event (other than the immediately preceding bullet point) that disrupts the ability
  of market participants effecting transactions in, or obtaining market values during the one
  hour period before the valuation time (typically the closing time), for (i) the index
  components constituting 20% or more of the Index or (ii) options or futures contracts
  relating to the Index;

and, in any of these events, the Calculation Agent determines in its sole discretion that the event could materially interfere with our ability or the ability of any of our affiliates to unwind all or a material portion of a hedge that could be effected with respect to the notes.

Neither of the following events will be a market disruption event with respect to a stock Index:

- a limitation on the hours or number of days of trading, but only if the limitation results from a previously announced change in the business hours of the relevant market, or
- a decision to permanently discontinue trading in options or futures contracts relating to the Index or to any index component.

For purposes of determining whether a Market Disruption Event has occurred, an "absence of trading" in the primary securities market on which a component of a stock Index is traded or on which options or futures contracts relating to The index or an index component are traded will not include any time when that market is itself closed for trading under ordinary circumstances. In contrast, a suspension or limitation of trading in any index component or in options or futures contracts relating to the Index or any index component or those contracts, by reason of:

- a price change exceeding limits set by that market,
- an imbalance of orders relating to the index component or those contracts, or
- a disparity in bid and ask quotes relating to that index component or those contracts,

will constitute a suspension or material limitation of trading in that index component or those contracts in that primary market.

# Adjustments

## Non-Exchange Business Days — Single Index

If any Observation Date with respect to a stock Index falls on a day that is not an Exchange Business Day with respect to such Index, such date with respect to such Index will be postponed to the next following Exchange Business Day. However, in no event will any Observation Date with respect to a stock Index be postponed by more than the Maximum Days of Postponement (as specified in the Final Terms) after the scheduled date for that Observation Date. If an Observation Date which immediately precedes the Stated Maturity Date or any Payment Date for the relevant note is postponed, the Stated Maturity Date or Payment Date will be postponed by the same number of Business Day(s) from and excluding the originally scheduled Observation Date to and including the actual Observation Date, subject to a maximum of the Maximum Days of Postponement; provided, however, that if the rescheduled Observation Date is more than five Business Days prior to the stated Maturity Date or Payment Date, then such stated Maturity Date or Payment Date shall not be postponed.

## Market Disruption Events — Single Index

If a Market Disruption Event occurs or is continuing with respect to a stock Index on any day that otherwise would be an Observation Date with respect to such Index, such date with respect to such Index will be postponed to the next following day that is both an Exchange Business Day with respect to such Index and a day on which no Market Disruption Event occurs or is continuing with respect to such Index. In no event, however, will any Observation Date with respect to a stock Index be postponed by more than the Maximum Days of Postponement (as specified in the Final Terms) after the scheduled date for that Observation Date. If an Observation Date which immediately precedes the stated Maturity Date or any Payment Date for the relevant note is postponed, the stated Maturity Date or Payment Date will be postponed by the same number of Business Day(s) from and excluding the originally scheduled Observation Date to and including the actual Observation Date, subject to a maximum of the Maximum Days of Postponement; provided, however, that if the rescheduled Observation Date is more than five Business Days prior to the stated Maturity Date or Payment Date is more than five Business Days prior to the stated Maturity Date or Payment Date is more than five Business Days prior to the stated Maturity Date or Payment Date shall not be postponed.

If an Observation Date with respect to a stock Index is postponed to the last possible day but a Market Disruption Event occurs or is continuing on that day with respect to such index or if no reference price is published by the Underlyer Sponsor with respect to that day, that day will nevertheless be an Observation Date with respect to such Index. If the Calculation Agent determines that a reference price with respect to the relevant Index is not published by The Underlyer Sponsor with respect to the postponed Observation Date, the Calculation Agent will determine the Reference Price of the Index in its sole discretion in accordance with the formula and method of calculating this index last in effect prior to the occurrence of the first of the above events using the exchange traded or quoted prices of each index stock comprised in the relevant Index as of the close of trading in that market on that day falling the Maximum Days of Postponement after the scheduled Observation Date. However, if any of the above events has occurred in respect to the relevant index stock on that day falling the Maximum Days of Postponement after the scheduled Observation Agent will use its good faith estimate of the value for the relevant index stock as of the close of trading in that market on that day.

## Multiple Underlyer Indices and Observation Dates — Common Exchange Business Day but Individual Market Disruption Event

Where the notes are linked to two or more indices (such indices being "**Underlyer Indices**" and each an "**Underlyer Index**") (e.g., an Asian Absolute Performance note or a Digital note) and the final terms specify that "Common Market Disruption Events" is Not Applicable, the following provisions shall apply:

- if a scheduled Observation Date is not an Exchange Business Day with respect to any of the Underlyer Indices and no market disruption event occurs or is continuing, the Observation Date will be postponed to the next day that is an Exchange Business Day for all Underlyer Indices; or
- if a scheduled observation date is an Exchange Business Day for all Underlyer Indices but a Market Disruption Event occurs or is continuing for any of the Underlyer Indices, the Observation Date will be postponed for the affected Underlyer Index only as described above under "Adjustments — Market Disruption Events — Single Index".

# Multiple Underlyer Indices and Observation Dates — Common Exchange Business Day and Common Market Disruption Event

Where the notes are linked to two or more indices (such indices being "**Underlyer Indices**" and each an "**Underlyer Index**") (e.g., an Asian Absolute Performance note or a Digital note) and the final terms specify that "Common Market Disruption Events" is Applicable, the following provisions shall apply:

- if a scheduled Observation Date is not an exchange Business Day with respect to any of the Underlyer Indices and no Market Disruption Event occurs or is continuing, the Observation Date will be postponed to the next day that is an Exchange Business Day for all Underlyer Indices;
- if a scheduled Observation Date is an Exchange Business Day for all Underlyer Indices but a Market Disruption Event occurs or is continuing for any of the Underlyer Indices, the observation Date will be postponed for all Underlyer Indices as described above under "Adjustments — Market Disruption Events — Single Index"; provided that if the Observation Date is postponed to the last possible date, for each Underlyer Index other than an affected Index as of such date, the relevant Reference Index Level shall be determined by reference to the Reference Price published by the Underlyer Sponsor on such last possible date.

## Averaging Observation Dates — Postponement

In respect of each Average Date and Initial Average Date (an "**Averaging Observation Date**"), if the Final Terms specify that "Averaging Postponement" is "Postponement", the following provisions shall apply:

- if a scheduled Averaging Observation Date is an exchange Business Day with respect to one or more of the Underlyer Indices and no Market Disruption Event occurs or is continuing in respect of such Underlyer Indices, the Observation Date will be such scheduled Averaging Observation Date for all such Underlyer Indices;
- if a scheduled Averaging Observation Date is not an exchange Business Day with respect to any of the Underlyer Indices and no Market Disruption Event occurs or is continuing, the Observation Date will be postponed to the next day that is an Exchange Business Day for the affected Underlyer Indices only;
- where the final terms specify that
  - "Common Market Disruption Events" is Not Applicable, if a scheduled Observation
    Date is an Exchange Business Day for all Underlyer Indices but a Market
    Disruption Event occurs or is continuing for any of the Underlyer Indices, the
    Observation Date will be postponed for the affected Underlyer Index only as
    described above under "Adjustments Market Disruption Events Single Index";
    - "Common Market Disruption Events" is Applicable if a scheduled Observation Date is an Exchange Business Day for all Underlyer Indices but a Market Disruption Event occurs or is continuing for any of the Underlyer Indices, the observation Date will be postponed for all Underlyer Indices as described above under "Adjustments — Market Disruption Events — Single Index"; provided that if the Observation Date is postponed to the last possible date, for each Underlyer Index other than an affected Index as of such date, the relevant Reference Index Level shall be determined by reference to the Reference Price published by the Underlyer Sponsor on such last possible date.

For the avoidance of doubt, an Averaging Observation Date determined in accordance with this section in respect of a scheduled Averaging Observation Date may fall on the same day that another Averaging Observation Date in respect of a different scheduled Observation Reference Date falls, whether or not such latter Averaging Observation Date was also determined in accordance with this provision.

## Averaging Observation Dates — Modified Postponement

In respect of each Average Date and Initial Average Date (an "Averaging Observation Date"), if the Final Terms specify that "Averaging Postponement" is "Modified Postponement", each Averaging Observation Date will be postponed as described under "— Averaging Observation Dates — *Postponement*" above, *provided however*, that if an Averaging Observation Date would otherwise be postponed to a day on which another Averaging Reference Date is or is deemed to have occurred, then such Averaging Observation Date will be further postponed to the next following day that is both an Exchange Business Day with respect to the relevant Index and a day on which no Market Disruption Event occurs or is continuing with respect to the relevant Index and on which another Averaging Reference Date does not or is not deemed to occur, *provided however* that in no event will any Observation Date with respect to a stock Index be postponed by more than the Maximum Days of Postponement (as specified in the Final Terms) after the scheduled date for that Observation Date.

## Discontinuance of Publication of a Stock Index

If the Underlyer Sponsor of an Index discontinues publication of such Index and the Underlyer Sponsor or anyone else publishes a substitute Index that the Calculation Agent determines is comparable to such Index, then the Calculation Agent will determine the amount payable by reference to that substitute Index. We refer to any substitute index approved by the calculation agent as a successor index.

If the Calculation Agent determines that the publication of an Index has been discontinued and there is no successor index, or that the level of an Index is not available on any Observation Date because of a Market Disruption Event or for any other reason, or if for any other reason an Index is not available to

us or the Calculation Agent on any relevant date, including our inability to use an Index for the purposes of performing the calculations required in connection with the note because such Index is not licensed for such purpose, the Calculation Agent will determine the amount payable using, in lieu of a published level for that Index, the level for that Index as at that Observation Date as determined by the Calculation Agent in accordance with the formula for and method of calculating that Index last in effect prior to the change, failure or cancellation, but using only those securities that comprised that Index immediately prior to that event.

If the calculation agent determines that an index, the components comprising an Index or the method of calculating an Index is changed at any time in any respect — including, but not limited to, by adding, deleting, substituting, reweighing or rebalancing any of the index components, and whether the change is made by the Underlyer Sponsor under its existing policies or following a modification of those policies, is due to the publication of a successor index, is due to events affecting one or more of the index components or their issuers or is due to any other reason — then the Calculation Agent may but shall not be required to determine the amount payable using, in lieu of a published level for that Index, the level for that Index as at that Observation Date as determined by the calculation agent in accordance with the formula for and method of calculating that Index last in effect prior to the change, failure or cancellation, but using only those securities that comprised that Index immediately prior to that event or to make such other adjustments as it believes are appropriate to determine that the amount payable on a payment date including at maturity is equitable. All determinations and adjustments to be made by the calculation agent with respect to an index (or component) may be made by the calculation agent in its sole discretion. The calculation agent is not obligated to make any such adjustments.

# **Currencies and Foreign Currency Exchange Rates**

# Publication Fixing Day

An Exchange Business Day with respect to a foreign exchange rate is a day on which either (1) an entity responsible for setting the official exchange rate, a spot exchange rate or other specified exchange rate or (2) transactions in the official exchange rate, spot exchange rate or other specified exchange rate are occurring in the global foreign exchange spot markets and foreign exchange markets are settling payments in the specified principal financial centers of the relevant currencies, and, in each case, a Market Disruption Event with respect to a foreign currency exchange rate has not occurred or is not continuing.

## Market Disruption Events

A Market Disruption Event with respect to a foreign currency exchange rate will be deemed to have occurred if an event has occurred or is continuing which makes it impossible for the Calculation Agent to obtain such relevant official exchange rate, spot exchange rate or other specified exchange rate.

## Adjustments

## Non-Publication Fixing Days

If any Observation Date with respect to a foreign currency exchange rate falls on a day that is not an Publication Fixing Day, the relevant Observation Date with respect to such rate will be postponed to the next following Publication Fixing Day. However, in no event will any Observation Date with respect to a Foreign Exchange Rate be postponed by more than the Maximum Days of Postponement (as specified in the Final Terms) after the scheduled date for that Observation Date. If an Observation Date immediately preceding the stated Maturity Date or any Payment Date for the relevant note is postponed, the stated Maturity Date or Payment Date will be postponed by the same number of Business Day(s) from and excluding the originally scheduled Observation Date to and including the actual Observation Date, subject to a maximum of the Maximum Days of Postponement (as specified in the Final Terms); provided, however, that if the rescheduled Observation Date is more than five Business Days prior to the stated Maturity Date or Payment Date, then such stated Maturity Date or Payment Date shall not be postponed in the event that an Observation Date has been postponed to the last date possible and such postponed date is not an Publication Fixing Day, the Calculation Agent shall determine the relevant official exchange rate, spot exchange rate or other specified exchange rate in a commercially reasonable manner in its sole discretion.

## Hedging in Connection with Issuance of Indexed Notes

In anticipation of the sale of indexed notes, we and/or our affiliates may enter into hedging transactions involving purchases of instruments linked to the relevant underlyer(s) on the trade date. In addition, from time to time after we issue the offered notes, we and/or our affiliates may enter into additional hedging transactions and unwind those hedging transactions we have entered into, in connection with such notes and perhaps in connection with other notes we issue, some of which may have returns linked to the relevant underlyer(s) or, if the underlyer is an index, all or a portion of the index components. Consequently, with regard to indexed notes, from time to time, we and/or our affiliates:

- expect to acquire and dispose of positions in listed or over-the-counter options, futures, swaps or other instruments linked to the relevant underlyer(s) or, if the underlyer is an index, all or a portion of the index components,
- if the underlyer is an index, may take or dispose of positions in the securities of the issuers of securities included in such indices,
- if the underlyer is an index, may take or dispose of positions in listed or over-the-counter options or other instruments based on indices designed to track the performance of relevant equity markets or components of such markets, and/or
- may take short positions in any of the underlyers.

We and/or our affiliates may acquire long or short positions in securities similar to the offered notes from time to time and may, in our or their sole discretion, hold or resell those securities.

In the future, we and/or our affiliates would expect to close out any hedge positions relating to your note and perhaps hedge positions relating to the underlyer(s) and, if the underlyer is an index, other notes with returns linked to the index components. Those steps are likely to involve sales and/or purchases of listed or over-the-counter options, futures or other instruments linked to the underlyer(s) or, if the underlyer is an index, they may also involve sales and/or purchases of some or all of the index components as well as listed or over-the-counter options, futures to the index components as well as listed or over-the-counter options, futures or other index components as well as listed or over-the-counter options, futures or other index.

The hedging activity discussed above may adversely affect the market price of your note from time to time and the supplemental payment amount, if any, we will pay on your note. See "Risk Factors — Considerations Relating to Indexed Notes — Trading and Other Transactions by Us in Instruments Linked to an Underlyer or the Components of an Underlyer May Impair the Market Price of an Indexed Note" and "Risk Factors — Considerations Relating to Indexed Notes The Business Activities of the Goldman Sachs Group May Create Conflicts of Interest Between You and Us" for a discussion of these adverse effects.

## **Change in Interest Rate Note Provisions**

If "Change in Interest Rate Note Provisions" is specified in your final terms as being applicable, then this paragraph shall apply. Your final terms will include a table in the row entitled "Change in Interest Rate Note Provisions" which sets for the method by which the interest payable on your notes is determined for each interest period. Different methods of determining the interest payable on your notes, which may include fixed rate, floating rate and indexed note provisions, will apply to different interest periods.

## **Redemption and Repayment**

## **Redemption at Maturity**

Unless previously redeemed, or purchased and cancelled as specified below, the notes will be redeemed by the Issuer by payment of the Amount Payable At Maturity (Final Redemption Amount) on the Maturity Date. In determining the Amount Payable At Maturity on your note, if your final terms specify the "Calculation Basis" to be "Per Denomination", then the amount payable at maturity will be calculated on a per denomination basis and if your final terms specify the "Calculation Basis" to be "Notional", then amount payable at maturity will be calculated on the basis of the outstanding face amount of your notes.

#### Notes other than Indexed (Participation) Notes and UDI-Linked Notes

If the Amount Payable at Maturity (Final Redemption Amount) row indicates both "Indexed (Participation) Notes" and "UDI-Linked Notes" is Not Applicable, then your final terms will specify a fixed percentage which will be 100% if the notes are redeemable at par, or may be some other fixed multiple of the face amount of your notes (greater than 100%) that will be payable on the maturity date.

## **UDI-Linked Notes**

If the Amount Payable at Maturity (Final Redemption Amount) row indicates "UDI-Linked Notes" is Applicable, then the Amount Payable at Maturity (Final Redemption Amount) payable in respect of the notes shall be equal to an amount in MXN equal to the *product of* (1) the UDI-Linked Notional Amount *times* (2) the UDI Index Level on the Observation Date *times* (3) a fixed percentage which may be 100%, or may be some other fixed multiple of the face amount of your notes (greater than 100%); *provided that* if such amount is less than the face amount of your notes, and your final terms specify the "UDI-Linked Floor" to be "100% of the Face Amount", the Amount Payable at Maturity (Final Redemption Amount) shall be an amount in MXN equal to 100% of the face amount of your notes.

Defined terms used in this sub-section "--- UDI-Linked Notes":

**Observation Date:** means the number of Business Days prior to the Stated Maturity Date specified in the applicable final terms.

Index: means Unidades de Inversión (UDI) or any successor or replacement index;

Index Sponsor(s): means Banco de Mexico or any successor Index Sponsor

**Initial Index Level:** means an amount specified as such in the applicable final terms.

**UDI-Linked Notional Amount:** means the face amount of the note, as specified in the applicable final terms, *divided* by the Initial Index Level, rounded as specified in your final terms.

**UDI Index Level**: means the official value of the Index, a MXN equivalent unit of account indexed to inflation on a daily basis, as measured by the change in the Mexican National Consumer Price Index (Indice Nacional de Precios al Consumidor) pursuant to the Decree approved by the Congress of Mexico and published in the Official Daily of the Federation on April 1, 1995, as amended from time to time, for purposes of determining the inflation-adjusted value of MXN and published by the index sponsor on its website <a href="http://www.banxico.org.mx/">http://www.banxico.org.mx/</a> (or any successor or replacement website); provided, however, that, if for any reason the UDI Index Level is not determined and published by the Index Sponsor for the Observation Date or, if applicable, an Interest Determination Date, or if UDI is replaced by another inflation-indexed unit of account that is reported, sanctioned, recognized, published, announced or adopted (or other similar action) by the relevant governmental authority and such event makes the inflation-indexed replacement unit of account impossible to obtain, the calculation agent will determine the UDI Index Level, or its replacement as the case may be, for the relevant date in its sole discretion acting in good faith and a commercially reasonable manner.

#### Indexed (Participation) Notes

If (i) the Amount Payable at Maturity (Final Redemption Amount) row indicates "Indexed (Participation) Notes" is applicable and (ii) either (a) "Maturity Lock-In" is indicated as not applicable or (b) "Maturity Lock-In" is indicated as applicable, but the Lock-In Condition (as defined under "Indexed Notes— Interest Rate Formulae—Digital" above) has not been satisfied, then the Amount Payable at Maturity (Final Redemption Amount) payable in respect of the notes shall be the Participation Amount, determined in accordance with the provisions below.

If your final terms indicate "Capped Participation" is applicable and "FX Participation" is not applicable the Participation Amount shall be an amount in the Specified Currency calculated in accordance with the formula below:

$$N \times \{Max \ [Floor; Min \ [Cap; 100 + (P \times Performance)]\}\}$$

If your final terms indicate "Capped Participation" and "FX Participation" are not applicable the Participation Amount shall be an amount in the Specified Currency calculated in accordance with the formula below:

$$N \times \{Max [Floor; 100 + (P \times Performance)]\}$$

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If your final terms indicate "Capped Participation" and "FX Participation" are applicable the Participation Amount shall be an amount in the Specified Currency calculated in accordance with the formula below:

$$N \times \{Max [Floor; Min [Cap; 100 + (P \times Performance \times FXR)]]\}$$

If your final terms indicate "Capped Participation" is not applicable and "FX Participation" is applicable the Participation Amount shall be an amount in the Specified Currency calculated in accordance with the formula below:

$$N \times \{Max [Floor; 100 + (P \times \text{Performance} \times \text{FXR})]\}$$

If your final terms indicate "Maturity Lock-In" is applicable, and the Lock-In Condition has been satisfied, then the Amount Payable at Maturity (Final Redemption Amount) payable in respect of the notes shall be the greater of the Participation Amount and the Lock-In Amount.

Defined terms used above:

**Base Currency** means the currency specified as such in the relevant Final Terms.

**Cap** means (i) an amount as specified in the relevant Final Terms or (ii) an amount determined by reference to market conditions by the Calculation Agent in its sole and absolute discretion on or after the Trade Date and, if specified in the relevant Final Terms, is expected to be such amount as specified in the relevant Final Terms but shall not be more than any maximum amount and/or less than any minimum amount, in each case, as may be specified in the relevant Final Terms.

**Fixing Price Sponsor** means the entity specified as such in the relevant Final Terms, or its successor or replacement, as determined by the Calculation Agent, that is responsible for setting the FX (Initial) and FX (Final), and in each case, if not specified, the corporation or other entity that, as determined by the Calculation Agent, is responsible for setting the relevant rate.

**Floor** means (i) an amount or amounts as specified in the relevant Final Terms, or (ii) an amount or amounts determined by reference to market conditions by the Calculation Agent in its sole and absolute discretion on or after the Trade Date and, if specified in the relevant Final Terms, is expected to be such

amount as specified in the relevant Final Terms but shall not be more than any maximum amount and/or less than any minimum amount, in each case, as may be specified in the relevant Final Terms, in each case of (i) and (ii), which amounts may be contingent on the Reference Price (Final). In no circumstance will the Floor be less than 90%.

#### FXR means

• if the Final Terms specify "Non-Inverse Return", an amount calculated by the Calculation Agent equal to:

*Max*{FXR Floor; *Min*[FXR Cap( 
$$\frac{FX(Final)}{FX(Initial)}$$
)]}

• if the Final Terms specify "Inverse Return", an amount calculated by the Calculation Agent equal to:

Max{FXR Floor; Min[FXR Cap;(
$$\frac{FX (Initial)}{FX (Final)})]}$$

**FXR Cap** means (i) an amount as specified in the relevant Final Terms or (ii) an amount determined by reference to market conditions by the Calculation Agent in its sole and absolute discretion on or after the Trade Date and, if specified in the relevant Final Terms, is expected to be such amount as specified in the relevant Final Terms but shall not be more than any maximum amount and/or less than any minimum amount, in each case, as may be specified in the relevant Final Terms.

**FXR Floor** means (i) an amount or amounts as specified in the relevant Final Terms, or (ii) an amount determined by reference to market conditions by the Calculation Agent in its sole and absolute discretion on or after the Trade Date and, if specified in the relevant Final Terms, is expected to be such amount as specified in the relevant Final Terms but shall not be more than any maximum amount and/or less than any minimum amount, in each case, as may be specified in the relevant Final Terms. In no circumstance will the FXR Floor be less than 90%.

**FX Price Source** means the display page(s) or price source(s) specified as such in the relevant Final Terms, or if the relevant rate is not published or announced by such FX Price Source at the relevant time, the successor or alternative price source, display page or publication for the relevant rate as determined by the Calculation Agent acting in its sole discretion.

**FX Rate** means the Specified Rate of the Base Currency/Reference Currency exchange rate, expressed as an amount of the Reference Currency per unit of the Base Currency.

## FX Valuation Date (Final) means

- if "Averaging" is specified in the relevant final terms as Applicable, the Last Averaging Date, after all adjustments to such date are made in accordance with the definition of "Averaging Dates", provided that such date will be further adjusted as described under "— Currencies and Foreign Currency Exchange Rates Adjustments".
- if "Averaging" is specified in the relevant final terms as Not Applicable, the Valuation Date, after all adjustments to such date are made in accordance with the definition of "Valuation Date", provided that such date will be further adjusted as described under "—Currencies and Foreign Currency Exchange Rates Adjustments".

## FX Valuation Date (Initial) means

• if "Averaging" is specified in the relevant final terms as Applicable, the Last Initial Averaging Date, after all adjustments to such date are made in accordance with the definition of

"Averaging Dates", provided that such date will be further adjusted as described under "— Currencies and Foreign Currency Exchange Rates — Adjustments".

• if "Averaging" is specified in the relevant final terms as Not Applicable, the Initial Valuation Date, after all adjustments to such date are made in accordance with the definition of "Valuation Date", provided that such date will be further adjusted as described under "— Currencies and Foreign Currency Exchange Rates — Adjustments".

**FX (Final)** means the FX Rate, as reported or published by the Fixing Price Sponsor at or around the Valuation Time on the FX Valuation Date (Final), as published on the FX Price Source for such day, determined by the Calculation Agent in its sole discretion.

# FX (Initial) means

- if the relevant final terms specifies an amount (expressed as an amount of the Reference Currency per unit of the Base Currency), such amount
- if the relevant final terms specifies "the Specified Rate", the Specified Rate of the Base Currency/Reference Currency exchange rate, expressed as an amount of the Reference Currency per unit of the Base Currency, as reported or published by the Fixing Price Sponsor at or around the Valuation Time on the FX Valuation Date (Initial), as published on the FX Price Source for such day, determined by the Calculation Agent in its sole discretion.

**Last Averaging Date** means the Averaging Date corresponding to the Maturity Date for the Index scheduled to fall on the date specified as the "Last Averaging Date" in your Final Terms.

**Last Initial Averaging Date** means the Initial Averaging Date for the Index scheduled to fall on the date specified as the "Last Initial Averaging Date" in your Final Terms.

**Lock-In Amount** A fixed percentage, specified in the relevant Final Terms, which will be 100% if the notes are redeemable at par, or may be some other fixed multiple of the face amount of your notes (greater than 100%) that will be payable on the maturity date.

"*Max*" followed by a series of amounts inside brackets, means whichever is the greater of the amounts separated by a semi-colon inside those brackets. For example, "Max(x;y)" means the greater of component x and component y.

"*Min*" followed by a series of amounts inside brackets, means whichever is the lesser of the amounts separated by a semi-colon inside those brackets. For example, "Min(x;y)" means the lesser of component x and component y.

N or Nominal Amount means an amount specified as such in the relevant Final Terms.

P or Participation means (i) an amount or amounts as specified in the relevant Final Terms, or (ii) an amount or amounts determined by reference to market conditions by the Calculation Agent in its sole and absolute discretion on or after the Trade Date and, if specified in the relevant Final Terms, is expected to be such amount as specified in the relevant Final Terms but shall not be more than any maximum amount and/or less than any minimum amount, in each case, as may be specified in the relevant Final Terms, in each case of (i) and (ii), which amounts may be contingent on the Reference Price (Final).

**Performance** means an amount equal to the Index Performance *minus* the Strike.

**Reference Currency** means the currency specified as such in the relevant Final Terms.

**Specified Rate** means the official fixing rate, official mid closing rate, spot rate, mid rate, fixing rate, as specified in the relevant Final Terms.

Strike means an amount specified as such in the relevant Final Terms.

**Valuation Time** means each time in the place specified as such in the relevant Final Terms (or such other time when the relevant rate of the FX Rate is published, as determined by the Calculation Agent).

#### Redemption at the Option of GS Finance Corp.

We will not be entitled to redeem your note before its stated maturity date unless your final terms specify "Additional Redemption Rights at the Option of the Issuer" to be applicable, except in the event of certain developments involving a change in law (including a change in tax law) or in connection with the imposition of United States withholding taxes for which we have agreed to pay additional amounts, as described in this subsection under "— Redemption Upon Change in Law," and "— Redemption Upon Obligation to Pay Additional Amounts" below. If your final terms specify "Additional Redemption Rights at the Option of the Issuer" to be applicable, they will also specify one or more "Issuer's Redemption Date(s)", and one or more "Issuer's Redemption Amount(s)". For the avoidance of doubt, if a range of dates is specified in your final terms as the "Issuer's Redemption Date(s)", each day within such range, including the initial and final dates of such range, shall be an Issuer's Redemption Date. The following paragraphs of this subsection apply only if the applicable final terms specify "Additional Redemption Rights at the Option of the Issuer" to be applicable final terms specify additional Redemption Rights at the Option of the subsection apply only if the applicable final terms specify "Additional Redemption Rights at the Option of the Issuer" to be applicable final terms specify and the initial and final dates of such range, shall be an Issuer's Redemption Date. The following paragraphs of this subsection apply only if the applicable final terms specify "Additional Redemption Rights at the Option of the Issuer" to be applicable.

Your note will be redeemable at our option, in whole or in part, on Issuer's Redemption Date(s). If we redeem your note, we will do so at the Issuer's Redemption Amount(s) specified in the applicable final terms. The Issuer's Redemption Amount(s) may be either (i) the Make Whole Redemption Amount (as defined below) or (ii) a percentage of the face amount of your note *plus* interest accrued but unpaid to the applicable Issuer's Redemption Date. For the avoidance of doubt, if the applicable Issuer's Redemption Amount on such Issuer's Redemption Date and there will be no double payment of accrued interest on the notes. If different prices are specified for different Issuer's Redemption Dates, the price we pay will be the price that applies to the Issuer's Redemption Date on which your note is redeemed in accordance with the applicable rules of Euroclear and Clearstream, Luxembourg. In the case of a partial redemption of the notes of any issuance, such partial redemption will be reflected in the records of Euroclear and Clearstream, Luxembourg.

"Make-Whole Redemption Amount" means an amount equal to the sum of:

(a) 100 per cent. of the face amount of the notes to be redeemed, plus

(b) the excess, if any, of (i) the then current values of the remaining scheduled payments of principal and interest, up to but not including the stated maturity date (or, if earlier, to the "Par Call Redemption Date" specified in the applicable final terms), discounted to the applicable Issuer Redemption Date on the Make-Whole Calculation Basis specified in the applicable final terms (based on the relevant Make-Whole Day Count Fraction specified in the applicable final terms) at a discount rate equal to the Reference Dealer Rate *plus* the Redemption Margin specified in the applicable final terms, in each case as determined by the Make-Whole Calculation Agent over (ii) 100 per cent. of the face amount of the notes to be redeemed.

If we exercise an option to redeem any note, we will give to the holder written notice (the "Issuer's Redemption Notice") of the principal amount of the note to be redeemed, no fewer than the number of days or Business Days specified in your final terms as the "Issuer's Redemption Notice Period," which shall in no case be fewer than five (5) Business Days, before the applicable Issuer's Redemption Date. We will give the notice in the manner described under "— Notices" below. In addition, if required, we will notify the London Stock Exchange of any redemption.

We, The Goldman Sachs Group, Inc. or our other affiliates may purchase notes from investors who are willing to sell from time to time, either in the open market at prevailing prices or in private transactions at negotiated prices. Notes that we or they purchase may, at our discretion, be held, resold or cancelled.

Defined terms used above:

"Make-Whole Calculation Agent" means a leading investment, merchant or commercial bank appointed by the Issuer or The Goldman Sachs Group Inc. for the purposes of calculating the Make-Whole Redemption Amount, and notified to the holder in the applicable Issuer's Redemption Notice.

"Reference Dealers" means five (or, in the circumstances set out in the definition of "Reference Security" below, three or four) credit institutions or financial services institutions that regularly deal in bonds and other debt securities as selected by the Make-Whole Calculation Agent after consultation with the Issuer.

"Reference Dealer Rate" means, with respect to the Issuer Redemption Date, the average of the five quotations of the mid-market annual yield to maturity of the Reference Security at the Quotation Time as specified in the applicable final terms on the third business day in the Quotation Jurisdiction as specified in the relevant final terms preceding the applicable Issuer's Redemption Date provided in writing to the Make-Whole Calculation Agent by the five Reference Dealers.

"Reference Security" means (a) any Reference Bond specified in the applicable final terms or (b) if no Reference Bond has been specified in the applicable final terms or if, at the Quotation Time on the third business day in the Quotation Jurisdiction as specified in the relevant Final Terms preceding the applicable Issuer's Redemption Date, the Reference Bond is no longer outstanding, such other central bank or government security that, in the majority opinion of three Reference Dealers (one of whom shall be the Make-Whole Calculation Agent) (i) has a maturity comparable to the remaining term of the note (or, if earlier, to the maturity at the Par Call Redemption Date specified in the applicable final terms) and (ii) would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the note (or, if earlier, to the maturity at the Par Call Redemption Date specified in the applicable final terms). In the event that each such Reference Dealer selects a different central bank or government security, the Make-Whole Calculation Agent after consultation with the Issuer shall approach a fourth Reference Dealer and, from the three different central bank or government securities selected by the other Reference Dealers, such fourth Reference Dealer shall select as the Reference Security the central bank or government security which, in its opinion (i) has a maturity comparable to the remaining term of the Notes (or, if earlier, to the maturity at the Par Call Redemption Date specified in the applicable final terms) and (ii) would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes (or, if earlier, to the maturity at the Par Call Redemption Date specified in the applicable final terms). The central bank or government security so selected by the fourth Reference Dealer shall then be the Reference Security.

## Repayment at the Holder's Option

You will not be entitled to require us to buy your note from you before its stated maturity, unless your final terms specify "Repayment at the Holder's Option" to be applicable. If your final terms specify "Repayment at the Holder's Option" to be applicable, they will also specify one or more "Holder's Redemption Date(s)", and one or more "Holder's Redemption Amount(s)" specified in the applicable final terms, which will be an amount equal to a percentage of the face amount of your note *plus* interest accrued but unpaid to the applicable Holder's Redemption Date. The following paragraphs of this subsection apply only if your final terms specify "Repayment at the Holder's Option" to be applicable.

Your note will be repayable at the holder's option on the specified Holder's Redemption Date at a percentage of the face amount of your note *plus* interest accrued but unpaid to the applicable Holder's Redemption Date. For the avoidance of doubt, if the applicable Holder's Redemption Date is an interest payment date, the holder will receive only the applicable Holder's Redemption Amount on such Holder's Redemption Date and there will be no double payment of accrued interest on the notes.

If a holder of a note wishes to exercise its option to redeem any note, the holder will need to deliver notice to a paying agent of GS Finance Corp. at least 30 days but not more than 45 days before the repayment date. Exercise of the repayment option by the holder of a note will be irrevocable. The holder of a note may not exercise the repayment option for less than the entire principal amount of its note.

If a note represented by a global note is subject to repayment at the holder's option, the depositary or its nominee, as the holder, will be the only person that can exercise the right of repayment. Any indirect owners who own beneficial interests in the global note and wish to exercise a repayment right must give proper and timely instructions to their banks or brokers through which they hold their interests, requesting that they notify the depositary to exercise the repayment right on their behalf. Different firms have different deadlines for accepting instructions from their customers, and you should take care to act promptly enough to ensure that your request is given effect by the depositary before the applicable deadline for exercise.

Street name and other indirect owners should contact their banks or brokers for information about how to exercise a repayment right in a timely manner.

## **Redemption Upon Change in Law**

The following paragraphs of this subsection apply only if your final terms specify "Redemption Upon Change in Law" to be applicable.

We may redeem, as a whole but not in part, any outstanding issuance of notes, if, at any time on or after the settlement date, a change in law has occurred with respect to such issuance, as described under "Description of the Program — Features Common to All Notes — Change in Law".

If we exercise the option to redeem, we will give to the holders of notes, not less than 30 nor more than 60 days' notice before the specified redemption date (unless otherwise required by law). In addition, if required, we will notify the London Stock Exchange of any redemption. The amount payable to the holders upon such redemption will be the Non-Scheduled Early Repayment Amount, which will be calculated as described under "— Non-Scheduled Early Repayment Amount" below. In the event of a change in law due to illegality, we will pay the Non-Scheduled Early Repayment Amount only to the extent permitted by applicable law.

We must deliver to the fiscal agent a certificate affirming that we are entitled to exercise the right of redemption and setting forth in reasonable detail a statement of facts showing that the conditions precedent to the right to redeem the notes have occurred.

## **Redemption Upon Obligation to Pay Additional Amounts**

The following redemption provisions will apply to the notes if the relevant final terms specify "Grossup and Call in the Case of Tax Law Changes" to be applicable.

We may redeem, as a whole but not in part, any outstanding notes of an issuance, if, as a result of certain changes in the laws or regulations of any U.S. taxing authority, at any time on or after the settlement date or such date as specified in the applicable final terms, we are obligated to pay, on the next succeeding interest payment date or maturity date, additional amounts, as described under "— Payment of Additional Amounts" below, and that obligation cannot be avoided by the use of reasonable measures available to us. If we exercise the option to redeem, we will give to the holders of notes to be redeemed, not less than 30 nor more than 60 days' notice before the specified redemption date. In addition, if required, we will notify the London Stock Exchange of any redemption. The amount payable to the holders upon such redemption will be the Non-Scheduled Early Repayment Amount, which will be calculated as described under "— Non-Scheduled Early Repayment Amount" below.

The obligation to pay additional amounts must remain in effect at the time we give notice of redemption, and that notice of redemption must be given no earlier than 90 days before the date on which

we would be obligated to pay additional amounts, if a payment in respect of the notes were then due. In addition, we must deliver to the fiscal agent a certificate affirming that we are entitled to exercise the right of redemption and setting forth in reasonable detail a statement of facts showing that the conditions precedent to the right to redeem the notes have occurred.

## Redemption Upon an Original Primary Rate Event

If, following the occurrence of an original primary rate event:

- (1) the calculation agent determines that it cannot identify a replacement primary rate or determine an adjustment spread on or before the Cut-off date;
- (2) it (A) is or would be unlawful at any time under any applicable law or regulation; or (B) would contravene any applicable licensing requirements, for the Calculation Agent to perform the actions prescribed in "Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR Notes and USD CMS Rate Notes" (or it would be unlawful or would contravene those licensing requirements were a determination to be made at such time);
- (3) the calculation agent determines that an adjustment spread is or would be a benchmark, index or other price source whose production, publication, methodology or governance would subject either the Issuer, The Goldman Sachs Group, Inc. or the calculation agent to material additional regulatory obligations (such as the obligations for administrators under the Benchmark Regulation) which it is unwilling to undertake; or
- (4) the calculation agent determines that having identified a replacement primary rate and determined an adjustment spread on or before the cut-off date, the adjustments provided for in "Effect of Original Primary Rate Event on EURIBOR Notes, Euro Interest Swap Rate Notes, non-USD LIBOR Notes and USD CMS Rate Notes" would not achieve a commercially reasonable result for either the Issuer, The Goldman Sachs Group, Inc., calculation agent or the holders,

then the Issuer may redeem the notes on such day as shall be notified to the holders in accordance with the notice provisions set forth above in "Redemption at the Option of the Goldman Sachs Group, Inc." The amount payable to the holders upon such redemption will be the Non-Scheduled Early Repayment Amount, which will be calculated as described under "— Non-Scheduled Early Repayment Amount" below.

"Cut-off date" means, in respect of an original primary rate and:

- (1) an original primary rate cessation, the later of (a) the date that falls the number of business days specified in the relevant final terms (or, if not so specified, the 30<sup>th</sup> business day following the occurrence of such original primary rate cessation, and (b) the first day on which the original primary rate is no longer available following such original primary rate cessation; or
- (2) an administrator/benchmark event, the later of (a) the date that falls the number of business days specified in the relevant final terms (or, if not so specified, 30<sup>th</sup> business day following the occurrence of such administrator/benchmark event, and (b) the administrator/benchmark event date.

## Non-Scheduled Early Repayment Amount

If we redeem notes prior to the stated maturity date following a change in law or upon becoming obliged to pay additional amounts, or if the maturity of the notes is accelerated following an event of default,

the amount payable to the holders upon such redemption or acceleration will be the Non-Scheduled Early Repayment Amount. The Non-Scheduled Early Repayment Amount will be calculated as follows:

- If "**Par Plus Accrued**" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", an amount equal to 100% of the principal of the notes *plus* accrued but unpaid interest to the date of redemption or acceleration;
- If "Accreted Value" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", an amount equal to 100% of the accreted value (as defined above under "— Interest Rates Fixed Rate Notes") as of the date of redemption or acceleration *plus*, if applicable, accrued but unpaid interest to the date of redemption or acceleration.
- If "UDI-Linked Accreted Value" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", an amount in MXN equal to the UDI-Linked Accreted Value (as defined below) as of the date of redemption or acceleration; *provided that* if such amount is less than the face amount of your notes, and your final terms specify the "UDI-Linked Floor" to be "100% of the Face Amount", the Non-Scheduled Early Repayment Amount shall be an amount in MXN equal to 100% of the face amount of your notes.
- If "**100% of the Face Amount**" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", an amount equal to 100% of the face amount of your note.
- If "UDI-Linked Amount" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", an amount equal to the UDI-Linked Notional Amount *times* the UDI Index Level (each as defined under "– Redemption and Repayment – Redemption at Maturity – UDI-Linked Notes" above) as of the date of redemption acceleration; *provided that* if such amount is less than the face amount of your notes, and your final terms specify the "UDI-Linked Floor" to be "100% of the Face Amount", the Non-Scheduled Early Repayment Amount shall be an amount in MXN equal to 100% of the face amount of your notes.
- If "UDI-Linked Par Plus Accrued" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", an amount equal to the UDI-Linked Notional Amount *times* the UDI Index Level (each as defined under "– Redemption and Repayment Redemption at Maturity UDI-Linked Notes" above) as of the date of redemption acceleration *plus* accrued but unpaid interest to the date of redemption or acceleration determined on such amount; *provided that* if such amount is less than the face amount of your notes, and your final terms specify the "UDI-Linked Floor" to be "100% of the Face Amount", the Non-Scheduled Early Repayment Amount shall be an amount in MXN equal to 100% of the face amount of your notes.
- If "Fair Market Value" is specified in the applicable final terms as the "Non-Scheduled Early Repayment Amount", then:
  - In case of a redemption following a change in law or upon becoming obliged to pay additional amounts, an amount equal to the fair market value of the notes on the second Business Day prior to the date of redemption, determined by the Calculation Agent by reference to such factors as the Calculation Agent considers to be appropriate, including, without limitation (a) market prices or values for the underlyer or underlyers and other relevant economic variables (such as interest rates and, if applicable, exchange rates) at the relevant time taking into account the bid or offer prices of the underlyer or underlyers (as relevant); (b) the remaining term of the notes had they remained outstanding to the stated maturity date and/or any optional early redemption date; (c) if applicable, accrued interest to the date

of redemption; and (d) internal pricing models of the Issuer, The Goldman Sachs Group, Inc. and/or their affiliates. The Calculation Agent may, in its reasonable discretion, adjust the Fair Market Value to account for any reasonable expenses and costs of (or benefit to) the Issuer, The Goldman Sachs Group, Inc. and/or their affiliates relating to the early redemption of the notes, including those relating to the unwinding of any underlying and/or related hedging arrangements and the hypothetical cost (or benefit) of replacing the amount of the funding provided by the notes at a reasonably equivalent maturity and ranking, in each case as determined by the Calculation Agent in its reasonable discretion.

In case of acceleration of the maturity of the notes following an event of default, an 0 amount equal to the fair market value of the notes as of the date of acceleration, determined by the Calculation Agent by reference to such factors as the Calculation Agent considers to be appropriate, including, without limitation (a) market prices or values for the underlyer or underlyers and other relevant economic variables (such as interest rates and, if applicable, exchange rates) at the relevant time taking into account the bid or offer prices of the underlyer or underlyers (as relevant); (b) the remaining term of the notes had they remained outstanding to the stated maturity date and/or any optional early redemption date; (c) if applicable, accrued interest to the date of acceleration; and (d) internal pricing models of the Issuer, The Goldman Sachs Group, Inc. and/or their affiliates. In calculating the Fair Market Value, the Calculation Agent shall assume that the Issuer and The Goldman Sachs Group, Inc. are Qualified Financial Institutions (as defined below) or, if the Calculation Agent determines that no Qualified Financial Institution exists, the Calculation Agent shall assume the Issuer and The Goldman Sachs Group, Inc. are Eligible Financial Institutions (as defined below) with the highest rating of all Eligible Financial Institutions in respect of outstanding debt obligations with a stated maturity of one year or less from the date of issue, such rating assigned by Standard & Poor's Ratings Group or any successor, or if such entity no longer exists, an entity selected by the Calculation Agent in its reasonable discretion.

Defined terms used above:

"UDI-Linked Accreted Value" means, for any given date, an amount in MXN, determined by the Calculation Agent, equal to the *product* of (A) the face amount of the note, as specified in the applicable final terms, times (B) (i) the *sum* of (x) 1, *plus* (y) the *product* of (a) the Implied ZC Rate *times* (b) the *quotient* of 182 *divided* by 360, and such sum *raised to the power* of (ii) the *quotient* of the number of calendar days from and including the issue date to but excluding the date of redemption or acceleration, *divided* by 182, *times* (C) the *quotient* of the UDI Index Level as of the date of redemption or acceleration, *divided* by the Initial Index Level. Expressed formulaically, for any given date, an amount in MXN equal to:

Accreted Notional Amount<sub>t</sub> = Face Amount × 
$$\left(1 + \text{Implied ZC Rate} \times \frac{182}{360}\right)^{\left(\frac{Date_t - IssueDate}{182}\right)} \times \frac{\text{UDI Index Level}_t}{\text{Initial Index Level}}$$

where:

**Date**<sub>t</sub> is the date of redemption or acceleration, if any.

**Date**<sub>t</sub> – **Issue Date** is the number of calendar days from and including the issue date to but excluding Date<sub>t</sub>.

Implied ZC Rate is the rate specified as such in the relevant final terms.

**Initial Index Level** has the meaning set forth under "– Redemption and Repayment – Redemption at Maturity – UDI-Linked Notes" above.

**UDI Index Level**<sub>t</sub> is the UDI Index Level (as defined under "– Redemption and Repayment – Redemption at Maturity – UDI-Linked Notes" above) on Date<sub>t</sub>.

"Qualified Financial Institution" means an Eligible Financial Institution, which at the time of calculation of the Non-Scheduled Early Repayment Amount has outstanding debt obligations with a stated maturity of one year or less from the date of issue and rated either: (i) A-1 or higher by Standard & Poor's Ratings Group or any successor, or any other comparable rating then used by that rating agency; or (ii) P-1 or higher by Moody's Investors Service, Inc. or any successor, or any other comparable rating then used by that rating agency.

"Eligible Financial Institution" means a financial institution organized under the laws of any jurisdiction in the United States of America, the United Kingdom or the European Union.

#### **Payment of Additional Amounts**

Unless required by law, we intend to make all payments on the notes without deducting U.S. withholding taxes. If we are required by law to withhold payments to non-U.S. investors, however, we will not pay additional amounts on those payments unless the applicable final terms explicitly state that the gross-up of any payments due on the notes is applicable, and we will pay additional amounts on payments that are required to be withheld only to the extent described in this subsection. The following discussion in this subsection applies only if the relevant final terms specify "Gross-up and Call in the Case of Tax Law Changes" to be applicable:

We will pay additional amounts on a note only if the beneficial owner of the notes is a United States alien. The term "United States alien" means any person who, for U.S. federal income tax purposes is:

- a nonresident alien individual;
- a foreign corporation;
- a foreign partnership one or more of the members of which, for U.S. federal income tax purposes, is a foreign corporation, a nonresident alien individual or a nonresident alien fiduciary of a foreign estate or trust; or
- a nonresident alien fiduciary of an estate or trust that is not subject to U.S. federal income tax on a net income basis on income or gain from a note.

If the beneficial owner of a note is a United States alien, we will pay all additional amounts that may be necessary so that every net payment of interest, premium, if any, or principal on that note will not be less than the amount provided for in that note. By net payment, we mean the amount we or our paying agent pays after deducting or withholding an amount for or on account of any present or future tax, assessment or other governmental charge imposed with respect to that payment by a U.S. taxing authority.

Our obligation to pay additional amounts is subject to several important exceptions, however. We will *not* pay additional amounts for or on account of any of the following:

• any tax, assessment or other governmental charge imposed solely because of any time there is or was a connection between the beneficial owner — or between a fiduciary, settler, beneficiary or member of the beneficial owner, if the beneficial owner is an estate, trust or partnership — and the United States (other than the mere receipt of a payment or the ownership or holding of a note), including because the beneficial owner — or the fiduciary, settler, beneficiary or member — at any time, for U.S. federal income tax purposes:

- is or was a citizen or resident or is or was treated as a resident of the United States;
- is or was present in the United States;
- is or was engaged in a trade or business in the United States;
- has or had a permanent establishment in the United States;
- is or was a passive foreign investment company or a controlled foreign corporation;
- is or was a corporation that accumulates earnings to avoid U.S. federal income tax; or
- is or was a "ten percent shareholder" of The Goldman Sachs Group, Inc.;
- any estate, inheritance, gift, sales, excise, transfer, wealth or personal property or any similar tax, assessment or other governmental charge;
- any tax, assessment or other governmental charge imposed solely because the holder or any other person fails to comply with any certification, identification or other reporting requirement concerning the nationality, residence, identity or connection with the United States of the holder or beneficial owner of such note, if compliance is required by statute or by regulation of the U.S. Treasury Department or by an applicable income tax treaty to which the United States is a party, as a precondition to exemption from such tax, assessment or other governmental charge;
- any tax, assessment or other governmental charge which is payable otherwise than by deduction or withholding from payments of principal of, premium, if any, or interest on such notes;
- any tax, assessment or other governmental charge imposed solely because the payment is to be made by a particular paying agent (including The Goldman Sachs Group, Inc.) and would not be imposed if made by another paying agent;
- any tax, assessment or other governmental charge imposed solely because the holder (1) is a bank purchasing the note in the ordinary course of its lending business or (2) is a bank that is neither (A) buying the note for investment purposes only nor (B) buying the note for resale to a third party that either is not a bank or holding the note for investment purposes only;
- any tax, assessment or other governmental charge imposed under Section 871(m) of the Code, and any current or future regulations or official interpretations thereof; or
- any combination of the taxes, assessments or other governmental charges described above.

In addition, any amounts to be paid on the notes will be paid net of any deduction or withholding imposed or required pursuant to Sections 1471 through 1474 of the Code, any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Code, or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such Sections of the Code, and no additional amounts will be required to be paid on account of any such deduction or withholding.

In addition, we will not pay additional amounts with respect to any payment of principal, premium, if any, or interest to any United States alien who is a fiduciary or a partnership, or who is not the sole beneficial owner of the payment, to the extent that we would not have to pay additional amounts to any

beneficiary or settlor of the fiduciary or any member of the partnership, or to any beneficial owner of the payment, if that person or entity were treated as the beneficial owner of the note for this purposes.

When we refer to a "U.S. taxing authority" in this subsection and "— Redemption and Repayment — Redemption Upon Obligation to Pay Additional Amounts" above, we mean the United States of America or any state, other jurisdiction or taxing authority in the United States. When we refer to the "United States", we mean the United States of America, including the states and the District of Columbia, together with the territories, possessions and all those areas subject to the jurisdiction of the United States of America.

When we refer to any payment of interest or principal on a note, this includes any additional amount that may be payable as described above in respect of that payment.

## Mergers and Similar Transactions

We are, and The Goldman Sachs Group, Inc. is, generally permitted to merge or consolidate with another corporation or other entity. We are and The Goldman Sachs Group, Inc. is also permitted to sell our or its assets substantially as an entirety to another corporation or other entity. With regard to your note, however, we or The Goldman Sachs Group, Inc. may not take any of these actions unless all of the following conditions are met:

- if the successor entity in the transaction is not GS Finance Corp. or The Goldman Sachs Group, Inc., as the case may be, the successor entity must be organized as a corporation, partnership or trust and must expressly assume our or The Goldman Sachs Group, Inc.'s obligations under the notes and the fiscal agency agreement with respect to that series. The successor entity may be organized under the laws of any jurisdiction, whether in the United States or elsewhere; and
- immediately after the transaction, no covenant breach or default under the notes of that issuance has occurred and is continuing. For this purpose, "covenant breach or default under the notes of that issuance" means a covenant breach or an event of default with respect to that issuance or any event that would be a covenant breach or event of default with respect to that issuance if the requirements for giving us or The Goldman Sachs Group, Inc. notice of such breach or default and for our or the Goldman Sachs Group, Inc.'s breach or default having to continue for a specific period of time were disregarded; and
- certain other conditions are met.

If the conditions described above are satisfied, neither we nor The Goldman Sachs Group, Inc. will need to obtain the approval of the holders of the notes in order to merge or consolidate or to sell our or The Goldman Sachs Group, Inc.'s assets. Also, these conditions will apply only if we or The Goldman Sachs Group, Inc.'s assets substantially as an entirety to another entity. Neither we nor The Goldman Sachs Group, Inc. will need to satisfy these conditions if we or The Goldman Sachs Group, Inc. enters into other types of transactions, including any transaction in which we or The Goldman Sachs Group, Inc. acquire the stock or assets of another entity, any transaction that involves a change of control of us or The Goldman Sachs Group, Inc. but in which we or The Goldman Sachs Group, Inc. does not merge or consolidate and any transaction in which we or The Goldman Sachs Group, Inc. sells less than substantially all our or The Goldman Sachs Group, Inc.'s assets. For the avoidance of doubt, a violation of these conditions, when applicable, will not constitute an Event of Default. While we are currently a wholly owned subsidiary of The Goldman Sachs Group, Inc., there is no requirement that we remain a subsidiary.

Also, if we or The Goldman Sachs Group, Inc. merges, consolidates or sells our or The Goldman Sachs Group, Inc.'s assets substantially as an entirety and the successor is a non-U.S. entity, neither we, nor The Goldman Sachs Group, Inc. nor any successor would have any obligation to compensate you for any resulting adverse tax consequences relating to the notes.

Notwithstanding the foregoing and for the avoidance of doubt, we may sell or transfer our assets substantially as an entirety, in one or more transactions, to one or more entities, provided that our assets and the assets of our direct or indirect subsidiaries in which we own a majority of the combined voting power, taken together, are not sold or transferred substantially as an entirety to one or more entities that are not majority-owned subsidiaries of The Goldman Sachs Group, Inc. The Goldman Sachs Group, Inc. may sell or transfer its assets substantially as an entirety, in one or more transactions, to one or more entities, provided that the assets of The Goldman Sachs Group, Inc. and its direct or indirect subsidiaries in which it owns a majority of the combined voting power, taken together, are not sold or transferred substantially as an entirety and its direct or indirect subsidiaries in which it owns a majority of the combined voting power, taken together, are not sold or transferred substantially as an entirety as an entirety to one or more entities.

## **Defeasance and Covenant Defeasance**

#### Full Defeasance

The provisions for full defeasance will apply to any fixed rate note, the principal of (and premium, if any) and interest on which is payable in U.S. dollars, and guarantee endorsed thereon so long as the note does not include the provisions discussed under "— Payment of Additional Amounts" above.

If there is a change in applicable U.S. federal tax law, as described below, we and The Goldman Sachs Group, Inc. can legally release ourselves from all payment and other obligations on any notes and guarantees endorsed thereon. This is called full defeasance. For us and The Goldman Sachs Group, Inc. to do so, each of the following must occur:

- we or The Goldman Sachs Group, Inc. must deposit in trust for the benefit of all holders of those notes (and guarantees endorsed thereon) money or a combination of money and/or U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on those notes on their various due dates or, if we choose, on redemption;
- such deposit must be held in a non-interest bearing segregated trust account designated as a special deposit account pursuant to a written agreement, to be governed by the laws of the State of New York, between us and the defeasance trustee whereby title of such account is in the name of the defeasance trustee solely in its capacity as defeasance trustee and not in its capacity as a deposit bank;
- there must be a change in current U.S. federal tax law or an Internal Revenue Service ruling that lets us or The Goldman Sachs Group, Inc. make the above deposit without causing the holders to be taxed on those notes any differently than if we or The Goldman Sachs Group, Inc. did not make the deposit and just repaid those notes ourselves or itself. Under current U.S. federal tax law, the deposit and our and The Goldman Sachs Group, Inc.'s legal release from your note and guarantee thereon would be treated as though we and The Goldman Sachs Group, Inc. took back your note and guarantee thereon and gave you your share of the cash and notes or bonds deposited in trust. In that event, you could recognize gain or loss on your note and guarantee thereon; and
- we or The Goldman Sachs Group, Inc. must deliver to the fiscal agent and the defeasance trustee a legal opinion of our counsel confirming the tax law change described above.

Any right we have to redeem any notes will survive full defeasance with respect to those notes.

If we or The Goldman Sachs Group, Inc. ever fully defeased your note or guarantee thereon, you would have to rely solely on the trust deposit for payments of your note and guarantee thereon. You would not be able to look to us or The Goldman Sachs Group, Inc. for payment in the event of any shortfall.

#### **Covenant Defeasance**

The provisions for covenant defeasance will apply to any fixed rate note, the principal of (and premium, if any) and interest on which is payable in U.S. dollars, and guarantee endorsed thereon.

Under current U.S. federal tax law, we can make the same type of deposit described in this subsection under "— Full Defeasance" above and be released from our obligations described under "— Mergers and Similar Transactions" above and any other covenants relating to your note or guarantee thereon that may be described in your final terms. This is called covenant defeasance. In that event, you would lose the protection of those restrictive covenants. In order to achieve covenant defeasance for any notes and guarantees thereon, we or The Goldman Sachs Group, Inc. must do both of the following:

- we or The Goldman Sachs Group, Inc. must deposit in trust for the benefit of the holders of those notes (and guarantees endorsed thereon) money or a combination of money and/or U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on those notes on their various due dates or, if we choose, on redemption;
- such deposit must be held in a non-interest bearing segregated trust account designated as a special deposit account pursuant to a written agreement, to be governed by the laws of the State of New York, between us and the defeasance trustee whereby title of such account is in the name of the defeasance trustee solely in its capacity as defeasance trustee and not in its capacity as a deposit bank; and
- we or The Goldman Sachs Group, Inc. must deliver to the fiscal agent and the defeasance trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing the holders to be taxed on those notes any differently than if we or The Goldman Sachs Group, Inc. did not make the deposit and just repaid those notes ourselves.

Any right we have to redeem the notes will survive covenant defeasance with respect to those notes.

If we or The Goldman Sachs Group, Inc. accomplish covenant defeasance on your note and the guarantee thereon, you can still look to us or The Goldman Sachs Group, Inc. for repayment of your note in the event of any shortfall in the trust deposit. You should note, however, that if one of the remaining events of default occurred, such as our bankruptcy, and your note became immediately due and payable, there may be a shortfall. Depending on the event causing the default, you may not be able to obtain payment of the shortfall.

## **Events of Default and Remedies**

## **Events of Default**

When we refer to an event of default with respect to any issuance of notes, we mean any of the following:

- we or The Goldman Sachs Group, Inc. does not pay the principal or any premium on any such notes within 30 days after the due date;
- we or The Goldman Sachs Group, Inc. does not pay interest on any such notes within 30 days after the due date; or
- we file for bankruptcy or other events of bankruptcy, insolvency or reorganization relating to us occur. Those events must arise under U.S. federal or state law, unless we merge, consolidate or sell our assets as described under "General Note Conditions —Mergers and Similar Transactions" above and the successor firm is a non-U.S. entity. If that happens,

then those events must arise under U.S. federal or state law or the law of the jurisdiction in which the successor firm is legally organized.

No other defaults under or breaches of the notes will result in an event of default, whether after notice, the passage of time or otherwise. However, certain events may give rise to a covenant breach, as described below under "— Covenant Breaches and Related Remedy".

#### **Covenant Breaches and Related Remedy**

When we refer to a covenant breach with respect to the notes, we mean the following:

- we are in breach of any covenant we make with respect to the notes; or
- except as provided by the fiscal agency agreement, the notes and the related guarantee, the guarantee ceases to be effective, or a court finds the guarantee to be unenforceable or invalid, or The Goldman Sachs Group, Inc. denies its obligations as the guarantor.

You may bring a lawsuit or other formal action against us for a covenant breach only if we remain in covenant breach more than 60 days after we receive a notice of such breach sent by the holders of at least 10% in principal amount of the notes then outstanding stating that we are in breach and requiring us to remedy the breach.

For the avoidance of doubt, a covenant breach shall not be an event of default with respect to any note.

#### Remedies

If an event of default occurs and is continuing (the default not having been cured or waived as provided under "— Meetings, Modification and Waiver of Covenants" below), the holder of an affected note may, at its option, by written notice to us and the fiscal agent, declare the principal amount of its note to be immediately due and payable. If the event of default occurs because of events in bankruptcy, insolvency or reorganization relating to The Goldman Sachs Group, Inc., the principal amount of the notes of that series will be automatically accelerated, without any action by the fiscal agent or any holder.

For the purpose of determining whether the holders of each of our notes are entitled to take any action under the fiscal agency agreement, we will treat the outstanding face amount of each such note as the outstanding principal amount of that note. Although the terms of each note may differ from those of the other notes of the same series, holders of specified percentages in principal amount of all notes of each such series will be able to take action affecting all notes of such series. This action may involve changing some of the terms that apply to the notes of the relevant series, accelerating the stated maturity date of the notes of the relevant series after a default or waiving some of our obligations under the fiscal agency agreement. These matters are discussed below under "— Events of Default and Remedies" and "— Meetings, Modification and Waiver of Covenants".

#### Amount Payable on Default

If an event of default occurs and the maturity of a note is accelerated, we will pay the applicable Non-Scheduled Early Repayment Amount, calculated as described above under "— Redemption and Repayment — Non-Scheduled Early Repayment Amount".

## Meetings, Modification and Waiver of Covenants

The fiscal agency agreement contains provisions for convening meetings of the holders of notes to consider matters affecting their interests. There are three types of changes which we and The Goldman Sachs Group, Inc. can make to either the fiscal agency agreement or any issuance of notes issued under that agreement and the related guarantees.

### **Changes Requiring Each Holder's Approval**

First, there are changes that cannot be made without the approval of each holder of the note affected by the change under the fiscal agency agreement. Here is a list of those types of changes:

- change the due date for the payment of principal of (or premium, if any) or any instalment of interest on any note;
- reduce the principal amount of any note, the portion of the principal amount which is payable upon acceleration of the maturity of the note, the interest rate or the premium payable upon redemption of the note;
- change the currency of payment in which the principal, premium or interest of any note is payable;
- change our obligation, if any, to pay additional amounts;
- shorten the period during which redemption of the notes is not permitted or permit redemption during a period when not previously permitted;
- modify our obligation to maintain required offices at which any payments on the notes are payable;
- reduce the percentage in principal amount of the notes outstanding necessary to modify, amend or supplement the fiscal agency agreement or the terms and conditions of the notes or to waive any past default or future compliance; or
- reduce the percentage of aggregate principal amount of the notes outstanding required for the adoption of a resolution or the quorum required at any meeting of holders of notes at which a resolution is adopted.

For the avoidance of doubt, we may make any change to a note where we have the consent of the holder of the note affected by the change and any such consent given by the holder will be binding on any successor holder of such note.

### Changes Not Requiring Approval

The second type of change does not require any approval by holders of the notes of an affected issuance. This type of change is limited to the following:

- for the purpose of adding to our or The Goldman Sachs Group, Inc.'s covenants for the benefit of any holders of any notes;
- for the purpose of surrendering any right or power conferred upon us or The Goldman Sachs Group, Inc. in any notes;
- for the purpose of evidencing the succession of another person or entity to us or The Goldman Sachs Group, Inc. and the assumption by any such successor of our or The Goldman Sachs Group, Inc.'s covenants and obligations in any notes or the fiscal agency agreement;
- for the purpose of curing any ambiguity in, or of curing, correcting or supplementing any defective provision of, any note or the fiscal agency agreement; or
- for the purpose of amending any note or the fiscal agency agreement in any other manner which we and the fiscal agent may determine, provided that such amendment shall not be

inconsistent with the notes of such series and shall not adversely affect the interest of any holder of any note of such series in any material respect.

We and The Goldman Sachs Group, Inc. may also make changes or obtain waivers that do not adversely affect a particular issuance of notes, even if they affect other issuances of notes. In those cases, neither we nor The Goldman Sachs Group, Inc. needs to obtain the approval of the holder of the unaffected notes; we and The Goldman Sachs Group, Inc. need only obtain any required approvals from the holders of affected notes.

### Changes Requiring the Approval of 66 2/3% of the Holders

Any other change to a particular issuance of notes would require the consent of at least 66 2/3% in aggregate principal amount of the affected notes at the time outstanding or the adoption of a resolution at a meeting of holders of the affected notes at which a quorum is present by 66 2/3% in aggregate principal amount of the affected notes then outstanding represented at such meeting. The same approval of 66 2/3% in aggregate principal amount of the affected notes then outstanding would be required for us to obtain a waiver of an event of default (including an event which is, or after lapse of time would become, an event of default), any of our covenants where we make promises about merging, which we describe under "— Mergers and Similar Transactions" above, and any other covenants in the fiscal agency agreement or final terms.

# **Special Rules for Action by Holders**

When holders take any action under the notes or the fiscal agency agreement, such as giving a notice of default or of covenant breach, declaring an acceleration, or approving any change or waiver, we will apply the following rules.

### Only Outstanding Notes Are Eligible

Only holders of outstanding notes of the applicable issuance will be eligible to participate in any action by holders of notes of that issuance. Also, we will count only outstanding notes in determining whether the various percentage requirements for taking action have been met. For these purposes, a note will not be "outstanding":

- if it has been surrendered for cancellation;
- if it is being held by the fiscal agent for re-issuance but has not yet been re-issued;
- if notes in lieu of or for substitution of the original notes have been authenticated and delivered;
- if we have deposited or set aside, in trust for its holder, money for its payment or redemption;
- if we have fully defeased it as described under "— Defeasance and Covenant Defeasance — Full Defeasance" above; or
- if we or one of our affiliates, such as Goldman Sachs International, is the owner.

### Meetings and other Actions

The quorum at any meeting called to adopt a resolution with respect to an issuance of notes will be persons holding or representing a majority in aggregate principal amount of that issuance of notes outstanding at the time and, at any reconvened meeting adjourned for lack of a quorum, 25% of the aggregate principal amount outstanding of that issuance of notes. For purposes of determining whether holders of the aggregate principal amount of notes required for any action or vote, or for any quorum, have taken such action or vote, or constitute such quorum, the principal amount of any particular note may differ

from its principal amount at stated maturity but will not exceed its stated face amount upon original issuance, in each case if and as indicated in your final terms. Holders may be entitled to make, take or give certain requests, demands, authorizations, directions, notices, consents, waivers or other action, or to vote on certain actions, authorized or permitted by the fiscal agency agreement with respect to the notes in accordance with the applicable procedures of the clearing systems and in accordance with such other reasonable procedures as we and the fiscal agent may agree.

## Determining Record Dates for Action by Holders

We and The Goldman Sachs Group, Inc. will be entitled to set any day as a record date for determining which holders or beneficial owners of notes in global form will be entitled to make, take or give certain requests, demands, authorizations, directions, notices, consents, waivers or other action, or to vote on certain actions, authorized or permitted by the fiscal agency agreement with respect to the notes. In addition, record dates for any note in global form may be set in accordance with procedures established by the relevant common depositary or common safekeeper, as applicable, from time to time. Accordingly, record dates for notes in global form may differ from those for other notes.

# Payment Mechanics for Notes

# Who Receives Payment?

Interest will be payable to the person in whose name a registered note is registered at the close of business on the regular record date for the relevant interest payment date. However, interest payable at maturity but on a day that is not an interest payment date will be payable to the person to whom principal is payable. The first payment of interest on any registered note originally issued after a regular record date and before the next interest payment date will be made on the interest payment date following the next regular record date to the person in whose name the note is registered at the close of business on such next succeeding regular record date. The "regular record date" with respect to any global note will be the first business day prior to each interest payment date (as such payment date may be adjusted in accordance with the business day convention) unless otherwise specified in the applicable final terms under "Regular Record Dates", and the "regular record date" with respect to any non-global registered rate note will be the date 15 calendar days prior to each interest payment date, whether or not such date is a business day.

# How We or The Goldman Sachs Group, Inc. Will Make Payments

Payments of principal of (and premium, if any) and interest on all notes will be made in the applicable specified currency at the offices and agencies described below. If the exchange rate agent determines, in respect of any payment of principal (and premium, if any) or interest on a note, that the applicable specified currency has been lawfully eliminated, converted, redenominated or exchanged for a successor currency, then such payment will be made in such successor currency in effect in the relevant country on the relevant payment date. Any calculations under the floating rate notes shall be adjusted accordingly by the calculation agent, acting in its sole discretion. In addition, payments of principal of (and premium, if any) and interest on notes denominated in a currency other than U.S. dollars, however, will nevertheless be made in U.S. dollars at our option in the case of imposition of exchange controls or other circumstances beyond our control as described in this subsection under "— When the Specified Currency Is Not Available" below. In the case of an indexed note, the amount of principal payable on such note may be determined by reference to an underlying asset, such as an index or other measure described in the applicable final terms.

# Payment on Global Notes

We or The Goldman Sachs Group, Inc. will make payments on a global note in accordance with the applicable policies of each of Euroclear and Clearstream, Luxembourg or some other depositary or common safekeeper, as applicable, as in effect from time to time. Under those policies, we or The Goldman Sachs Group, Inc. will pay directly to Euroclear and Clearstream, Luxembourg, and not to any indirect owners who own beneficial interests in the global note. An indirect owner's right to receive those payments

will be governed by the rules and practices of Euroclear and Clearstream, Luxembourg and their participants, as described under "- Form, Exchange, Registration and Transfer" below.

### Payment on Registered Notes

We or The Goldman Sachs Group, Inc. will make payments on a note in registered non-global form as follows. We will pay interest that is due on an interest payment date to the holder at his or her address shown on the register for such notes as of the close of business on the regular record date. We or The Goldman Sachs Group, Inc. will make all other payments by check or via wire transfer at the corporate trust office of the fiscal agent in the Borough of Manhattan, New York City and at the office of the paying agent, against surrender of the note.

### When the Specified Currency Is Not Available

If we or The Goldman Sachs Group, Inc. is obligated to make any payment in a specified currency other than U.S. dollars and the specified currency or any successor currency is not available to us or The Goldman Sachs Group, Inc. due to circumstances beyond our or its control — such as the imposition of exchange controls or a disruption in the currency markets — we or The Goldman Sachs Group, Inc. will be entitled to satisfy our or The Goldman Sachs Group, Inc.'s obligation to make the payment in that specified currency by making the payment in U.S. dollars, on the basis of the exchange rate determined by the exchange rate agent described below, in its discretion.

The foregoing will apply to any note, whether in global or non-global form, and to any payment, including a payment at maturity. Any payments made under the circumstances and in a manner described above will not result in a default under any note.

In addition, if your final terms specify "Postponement Following FX Disruption Event and Payments in USD" to be applicable, the following paragraph will apply to your notes. We or The Goldman Sachs Group, Inc. will be entitled to postpone any payment date and satisfy our payment obligations as described below. If an FX disruption event has occurred and is continuing with respect to any payment date, such payment date shall be postponed until the earlier of (A) the second business day following the day on which such FX disruption event ceases to exist and (B) the second business day following the FX disruption event cut-off date. If an FX disruption event is continuing with respect to the FX disruption event cut-off date of such payment date as so postponed, we or The Goldman Sachs Group, Inc. may determine that the USD shall be the settlement currency for all amounts payable on such payment date as postponed, using the USD/specified currency exchange rate, as determined by the calculation agent by requesting each of the reference dealers to provide a firm quotation of the rate (expressed as an amount of USD/specified currency) at which the calculation agent is able to buy the relevant amount of USD for the amount of specified currency payable on such payment date as postponed, based upon each reference dealer's experience in the foreign exchange market for the specified currency and the general activity in such market on the FX disruption event cut-off date. If at least two quotations are provided, the relevant rate will be the arithmetic mean of such quotations. If fewer than two quotations are provided, the calculation agent may request each of the major banks (as selected by the calculation agent) in the relevant market to provide a quotation of the rate (expressed as an amount of USD/specified currency) at which the calculation agent is able to buy the relevant amount of USD for the amount of specified currency payable on such payment date as postponed. If fewer than two quotations are provided, then the calculation agent shall determine the USD/specified currency exchange rate on such day in its discretion, acting in good faith and in a commercially reasonable manner. No amount of interest shall be payable in respect of the delay in payment of any amount due to the postponement of any payment date due to the occurrence of an FX disruption event.

The foregoing paragraph (if applicable) will apply to any note, whether in global or non-global form, and to any payment, including a payment at maturity. Any payments made under the circumstances and in a manner described above will not result in a default under any note.

Defined terms used above:

The term "*FX disruption event*" means the determination by the calculation agent, in its sole discretion, that it is not possible or practicable for the Issuer to pay any amount in the specified currency payable in respect of the notes on any payment date due to illiquidity, inconvertibility or non-transferability of the specified currency or due to the Issuer's inability to obtain sufficient amount of the specified currency or any other event beyond the control of the Issuer.

The term "*FX disruption event cut-off date*" means the date which is fifteen (15) business days after the originally scheduled payment date or such other period if specified in your final terms.

The term "*reference dealers*" means four leading dealers in the relevant foreign exchange market, as determined by the calculation agent.

The term "*specified currency*" means the currency specified as such in the relevant final terms.

# Exchange Rate Agent

If we issue a note in a specified currency other than U.S. dollars, we will appoint a financial institution to act as the exchange rate agent. Unless otherwise specified in the applicable final terms, the exchange rate agent will initially be Goldman Sachs International. We may select Goldman Sachs International or another of our affiliates to perform this role. We may change the exchange rate agent from time to time after the original issue date of the notes without your consent and without notifying you of the change.

All determinations made by the exchange rate agent will be in its sole discretion unless we state in the applicable final terms that any determination requires our approval. In the absence of manifest error, those determinations will be conclusive for all purposes and binding on you and us and The Goldman Sachs Group, Inc., without any liability on the part of the exchange rate agent.

## Payment When Offices Are Closed

If any payment is due on a note on a day that is not a business day, we will make the payment on the next day that is a business day. Payments postponed to the next business day in this situation will be treated under the applicable note as if they were made on the due date. Postponement of this kind will not result in a default under any note, and no interest will accrue on the postponed amount from the due date to the next day that is a business day. The term business day has a special meaning which we describe under "— Features Common to All Notes — Business Days" above.

# The Paying Agent

We have initially appointed as paying agent The Bank of New York Mellon. We may at any time terminate the appointment of any paying agent and appoint additional or other paying agents. However, we will maintain a paying agent for payment of principal of (and premium, if any) and interest on the notes in one or more European cities, until all outstanding notes have been delivered to the fiscal agent for cancellation, or monies sufficient to pay the principal of (and premium, if any) and interest on all outstanding notes have been made available for payment and either paid or returned to us as provided in the notes. As long as the notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a paying agent in any particular place, we will maintain a paying agent having its specified office in the place required by such competent authority, stock exchange and/or quotation system. Notice of any such termination or appointment and of any changes in the office through which any paying agent will act will be given as described under "— Notices" below.

### **Unclaimed Payments**

All money paid by us to a paying agent that remains unclaimed at the end of two years after the amount is due and payable (whether it be principal (and premium, if any) or interest) to a holder will be paid

to us. After that two-year period, the holder may look only to us or The Goldman Sachs Group, Inc. for payment and not to the fiscal agent, any other paying agent or anyone else.

### Form, Exchange, Registration and Transfer

#### **Registered Notes**

We will issue notes as global notes in registered form. If the notes are stated in the applicable final terms to be issued under NSS and that they are intended to be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations, then the notes will be registered in the name of a nominee for a common safekeeper for Euroclear and Clearstream, Luxembourg and we will deliver these notes to a common safekeeper for Euroclear and Clearstream, Luxembourg. Delivering the notes to a common safekeeper does not necessarily mean that the notes will be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any time or all times during their life.

Global notes in registered form which are not issued under NSS will be deposited with, and registered in the name of a nominee of, a common depositary for Euroclear and Clearstream, Luxembourg or other clearing system as specified in the applicable final terms.

Investors may hold book-entry interests in a global note through organizations that participate, directly or indirectly, in the Euroclear and Clearstream, Luxembourg systems. Book-entry interests in the registered notes and all transfers relating to the registered notes will be reflected in the book-entry records of Euroclear and Clearstream, Luxembourg. The initial common depositary for Euroclear and Clearstream, Luxembourg will be The Bank of New York Mellon, London Branch. The Depository Trust Company will not be the depositary for the notes.

The distribution of the registered notes will be cleared through Euroclear and Clearstream, Luxembourg. Any secondary market trading of book-entry interests in the registered notes will take place through Euroclear and Clearstream, Luxembourg participants and will settle in same-day funds.

Euroclear and Clearstream, Luxembourg have established electronic securities and payment transfer, processing, depositary and custodial links among themselves and others, either directly or through custodians and depositaries. These links allow securities to be issued, held and transferred among the clearing systems without the physical transfer of certificates. Special procedures to facilitate clearance and settlement have been established among these clearing systems to trade securities across borders in the secondary market.

The policies of Euroclear and Clearstream, Luxembourg will govern payments, transfers, exchanges, setting of record dates and other matters relating to the investor's interest in securities held by them. We have no responsibility for any aspect of the records kept by Euroclear and Clearstream, Luxembourg or any of their direct or indirect participants. We also do not supervise these systems in any way.

Euroclear and Clearstream, Luxembourg and their participants perform these clearance and settlement functions under agreements they have made with one another or with their customers. You should be aware that they are not obligated to perform or continue to perform these procedures and may modify or discontinue them at any time.

Except as provided below, owners of beneficial interests in the registered notes will not be entitled to have the notes registered in their names, will not be entitled to receive physical delivery of the notes in definitive form and will not be considered the owners or holders of the registered notes under the fiscal agency agreement governing the notes. Accordingly, each person owning a beneficial interest in a registered note must rely on the procedures of the depositary and, if such person is not a participant, on the procedures of the participant through which such person owns its interest, in order to exercise any rights of a holder of notes.

Any note we issue may be represented by a master global note.

### **Certificated Notes**

We will issue notes to you or your nominees, in fully certificated registered form, only if (1) we advise the fiscal agent in writing that both Euroclear and Clearstream, Luxembourg are no longer willing or able to discharge their responsibilities properly, and the fiscal agent or we are unable to locate qualified successors within 60 days; (2) an event of default with respect to the notes has occurred and is continuing under the notes; or (3) we, at our option, elect to terminate the book-entry system. If any of the three above events occurs, we will reissue the notes (as authenticated by the fiscal agent) in fully certificated, registered form and will recognize the registered holders of the certificated notes as holders under the fiscal agent.

In the event individual certificates for the notes are issued, the holders of such notes will be able to receive payment on the notes, effect transfers and exchanges of the notes and replace lost, stolen, destroyed or mutilated notes at the offices of the Luxembourg paying and transfer agent. We have appointed Banque Internationale à Luxembourg, *société anonyme* as paying and transfer agent in Luxembourg with respect to the notes in individual certificated form. As long as the notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a paying agent and /or a transfer agent in any particular place, we will maintain a paying agent and/or quotation system. If we add, replace or terminate a paying and transfer agent or fiscal agent, we will give notice in the manner described below.

Unless and until we issue the notes in fully certificated, registered form, (1) you will not be entitled to receive a certificate representing your interest in the notes; (2) all references in this Base Prospectus to actions by holders will refer to actions taken by the depositary, which may act upon instructions from direct participants in Euroclear or Clearstream, Luxembourg; and (3) all references in this Base Prospectus to payments and notices to holders will refer to payments and notices to the depositary, as the registered holder of the notes, which may distribute them to you in accordance with its policies and procedures.

The fiscal agent will mail notices by first class mail, postage prepaid, to each holder's last known address as it appears in the security register that the fiscal agent maintains. The fiscal agent will only mail these notices to the registered holder of the notes, unless we reissue the notes to you or your nominees in fully certificated form.

### Extensions for Further Issuances

Without the consent of any holders or the fiscal agent, Goldman Sachs International or any other underwriter, dealer or agent or any other person, we may issue additional notes identical to a prior issue from time to time.

### **Other Exchanges**

Owners of certificated registered notes will be able to exchange them for registered notes of smaller denominations or combined into notes of larger denominations, as long as the total principal amount is not changed. If any registered note is partially redeemed, the owner may similarly exchange the unredeemed portion of a note.

Each note authenticated and delivered upon any transfer or exchange of any note (whether in whole or in part) will carry the same rights to future accrued interest and to interest accrued and unpaid that was carried by the surrendered note (or part thereof).

### **Special Considerations for Global Securities**

As an indirect owner, an investor's rights relating to a global security will be governed by the account rules of the depositary and those of the investor's financial institution or other intermediary through

which it holds its interest (*e.g.*, if Euroclear or Clearstream, Luxembourg is the depositary or common safekeeper), as well as general laws relating to securities transfers. We do not recognize this type of investor or any intermediary as a holder of securities and instead deal only with the depositary or common safekeeper that holds the general security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her own name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe above;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities;
- an investor may not be able to sell interests in the securities to some insurance companies and other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's or common safekeeper's policies will govern payments, deliveries, transfers, exchanges, notices and other matters relating to an investor's interest in a global security, and those policies may change from time to time. We, the fiscal agent and any agent will have no responsibility for any aspect of the depositary's or common safekeeper's policies, actions or records of ownership interests in a global security. We, the fiscal agent and any agent also do not supervise the depositary or common safekeeper in any way;
- the depositary or common safekeeper will require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary's or common safekeeper's book-entry system and through which an investor holds its interest in the global securities, directly or indirectly, may also have their own policies affecting payments, deliveries, transfers, exchanges, notices and other matters relating to the securities, and those policies may change from time to time. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the policies or actions or records of ownership interests of any of those intermediaries.

### Considerations Relating to Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg are securities clearing systems in Europe. Both systems clear and settle securities transactions between their participants through electronic, book-entry delivery of securities against payment. In addition, Euroclear and Clearstream, Luxembourg may be depositaries for a global security.

As long as a global note is held by Euroclear and Clearstream, Luxembourg, you may hold an interest in the global note only through an organization that participates, directly or indirectly, in Euroclear or Clearstream, Luxembourg.

As noted above, payments, deliveries, transfers, exchanges, notices and other matters relating to the notes made through Euroclear and Clearstream, Luxembourg must comply with the rules and procedures of those clearing systems. Those clearing systems could change their rules and procedures at any time. We have no control over those systems or their participants and we take no responsibility for their activities.

In addition, we may provide for other securities clearing systems and other depositaries or common safekeepers in the applicable final terms.

### Registration of Transfer

Holders of registered notes may present them for registration of transfer (with the form of transfer properly executed and endorsed) or exchange at the corporate trust office of the fiscal agent or at the office of any transfer agent that we designate for that purpose. Holders will not be required to pay a service charge, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange, and as described in the fiscal agency agreement. Unless we say otherwise in the applicable final terms, the transfer or exchange, and any replacement, will be made only if our fiscal agent or transfer agent, as the case may be, is satisfied with the documents of title and the identity of the person making the request. The transfer or exchange may also be subject to reasonable regulations that we may from time to time agree upon with the fiscal agent and any transfer agent.

We have initially appointed as security registrar and transfer agent, the fiscal agent acting through its corporate trust office in the Borough of Manhattan, New York City. We have also appointed the paying agent listed at the end of this Base Prospectus as a transfer agent of registered notes. We will name any additional initial transfer agents for any issuance of notes in the applicable final terms. We reserve the right to vary or terminate the appointment of the fiscal agent as security registrar or of any transfer agent or to appoint additional or other registrars or transfer agents or to approve any change in the office through which any registrar or any transfer agent acts. However, there will be at all times a registrar and transfer agent in the Borough of Manhattan, New York City.

If any issuance of notes is redeemable and we redeem less than all those notes, we may block the transfer or exchange of those notes during the period beginning 15 days before the day we mail the notice of redemption and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any notes selected for redemption, except that we will continue to permit transfers and exchanges of the unredeemed portion of any notes being partially redeemed.

### Payment of Stamp and Other Taxes

We shall pay all stamp and other duties, if any, which may be imposed by the United States or any U.S. political subdivision or taxing authority with respect to the fiscal agency agreement or the issuance of the notes. Except as described under "— Payment of Additional Amounts" above, we will not be required to make any payment with respect to any tax, assessment or governmental charge imposed by any government or any political subdivision or taxing authority.

### Notices

As long as any notes are listed on the Official List of the London Stock Exchange and its rules require, notices to holders of notes will be given by publication in a daily newspaper of general circulation in London, which we expect to be the *Financial Times*, or, if such publication is not practicable, in a leading English language daily newspaper having general circulation in Europe. The term "daily newspaper" means a newspaper that is published on each day, other than a Saturday, Sunday or holiday, in London or, when applicable, elsewhere in Western Europe. A notice will be considered received on the date it is first published. If notice cannot be given as described in this paragraph because the publication of any newspaper is suspended or it is otherwise impractical to publish the notice, then notice will be given in another form. That alternate form of notice will be sufficient notice to each holder. Notices to be given to holders of notes in registered form will be deemed delivered when mailed. Neither the failure to give notice to a particular holder, nor any defect in a notice given to a particular holder, will affect the sufficiency of any notice given to another holder.

### Title

We, the fiscal agent and any of our agents may deem and treat the registered owner of any registered note as the absolute owner (whether or not the note is overdue and notwithstanding any notice to the contrary) for the purpose of making payment and for all other purposes.

### **Replacement of Notes**

If your notes become mutilated, destroyed, stolen or lost, we will replace them at your expense upon the delivery to the fiscal agent or the paying agent of the mutilated notes or evidence of the loss, theft or destruction satisfactory to the fiscal agent or the paying agent and us. In the case of a lost, stolen or destroyed note, an indemnity satisfactory to the fiscal agent or the paying agent and us may be required at your expense before a replacement note will be issued, and we may require that you pay any taxes and other governmental charges payable in connection with the replacement of notes and any other expenses (including the fees and expenses of the fiscal agent) connected with the replacement.

#### Guarantee by The Goldman Sachs Group, Inc.

The Goldman Sachs Group, Inc. will fully and unconditionally guarantee the payment of principal of, and any interest and premium on, the notes, when due and payable, whether at the stated maturity, by declaration of acceleration, call for redemption or otherwise, in accordance with the terms of the notes, the fiscal agency agreement and the applicable final terms accompanying this Base Prospectus. The guarantee will remain in effect until the entire principal of, and interest and premium, if any, on, the notes has been paid in full or discharged in accordance with the provisions of the fiscal agency agreement, or otherwise fully defeased by The Goldman Sachs Group, Inc.

Because The Goldman Sachs Group, Inc. is a holding company, its ability to perform its obligations on the guarantees endorsed on our debt securities will depend in part on its ability to participate in distributions of assets from its subsidiaries. We discuss these matters above under "Description of the Program — The Goldman Sachs Group, Inc. is a Holding Company".

The guarantee by The Goldman Sachs Group, Inc. of our debt securities issued under the fiscal agency agreement will rank equally in right of payment with all senior indebtedness of The Goldman Sachs Group, Inc.

### PLAN OF DISTRIBUTION

We, The Goldman Sachs Group, Inc. and Goldman Sachs International, as the agent, have entered into a distribution agreement with respect to the notes. Subject to certain conditions, the agent has agreed to use its reasonable efforts to solicit purchases of notes. We have the right to accept offers to purchase notes and may reject any proposed purchase of the notes. The agent may also reject any offer to purchase notes.

We may also sell notes to the agent who will purchase the notes as principal for its own account. In that case, the agent will purchase the notes at a price equal to the issue price specified in the applicable final terms, less a discount. The discount will equal the applicable commission on an agency sale of the notes with the same stated maturity.

The agent may resell any notes it purchases as principal to other brokers or dealers at a discount, which may include all or part of the discount the agent received from us. If all the notes are not sold at the initial offering price, the agent may change the offering price and the other selling terms.

We may also sell notes directly to investors. We will not pay commissions on notes we sell directly. In addition, we may enter into further distribution agreements with agents other than Goldman Sachs International with respect to the notes.

The notes and guarantees are not, and will not be, registered under the United States Securities Act of 1933, as amended, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the Securities Act. (Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.)

The notes are a new issue of securities, and there will be no established trading market for any note before its original issue date. We have been advised by Goldman Sachs International that it intends to make a market in the notes. However, neither Goldman Sachs International nor any of our other affiliates nor any other agent named in your final terms that makes a market is obligated to do so and any of them may stop doing so at any time without notice. No assurance can be given as to the liquidity or trading market for the notes.

We may use this Base Prospectus in the initial sale of any note. In addition, Goldman Sachs International or any of our other affiliates may use this Base Prospectus in a market-making transaction in any note after its initial sale. Unless we (or our agent) inform the purchaser otherwise in the confirmation of sale, this Base Prospectus is being used in a market-making transaction.

Goldman Sachs International has agreed in the distribution agreement that, with respect to all notes issued as a part of the same tranche (within the meaning of Regulation S under the Securities Act), it will not offer, sell or deliver such notes, (1) as part of their distribution at any time or (2) otherwise until 40 days after the later of (A) the completion of the distribution of such tranche of notes as determined by Goldman Sachs International and (B) the closing date of such tranche of notes (or such other date as GS Finance Corp. may, in its sole discretion, deem necessary to comply with Regulation S) within the United States or to, or for the account or benefit of, U.S. persons except, in either case, in accordance with Regulation S under the Securities Act, and it will have sent to each dealer to which it sells such notes during the restricted period a confirmation or other notice describing the restrictions on offers and sales of notes within the United States or to, or for the account or benefit of, U.S. persons.

### **Selling Restrictions**

# **Prohibition of Sales to EEA Retail Investors**

Goldman Sachs International has represented and agreed, and each further dealer or offeror of the notes under the program will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any notes which are the subject of the

offering contemplated by this Base Prospectus as completed by the final terms in relation thereto to any retail investor in the EEA.

For purposes of this provision:

- (a) the expression "retail investor" means a person who is one (or more) of the following:
  - (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or

 a customer within the meaning of the Insurance Distribution Directive, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; and

(b) the expression an "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes.

For the purposes of the foregoing, the expression an "offer of notes to the public" in relation to any notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes.

### **Other Selling Restrictions**

#### United Kingdom

Goldman Sachs International has represented and agreed, and each further dealer or offeror of the notes appointed under the program will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any notes which are the subject of the offering contemplated by this Base Prospectus as completed by the final terms in relation thereto to any retail investor in the UK.

For the purposes of this provision:

(a) the expression "retail investor" means a person who is one (or more) of the following:

(i) a retail client as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA;

(ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; and

(b) the expression an "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes.

For purposes of the foregoing, the expression an "offer of notes to the public" in relation to any notes means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes.

Goldman Sachs International has represented and agreed, and each further dealer or offeror of the notes appointed under the program will be required to represent and agree, that:

- (a) in relation to any notes which have a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell any notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the notes would otherwise constitute a contravention of Section 19 of the FSMA by The Goldman Sachs Group, Inc.;
- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any notes in circumstances in which Section 21(1) of the FSMA does not apply to The Goldman Sachs Group, Inc.; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any notes in, from or otherwise involving the UK.

### Argentina

The offering of notes has not been authorised by, and the notes have not been registered with, the Argentine Securities Commission (*Comisión Nacional de Valores,* "CNV"). The CNV has not approved this Base Prospectus or any other document related to the offering of the notes in Argentina. The notes will not be offered or sold in Argentina except in transactions that may not constitute a public offering of securities within the meaning of Sections 2 and 83 of the Capital Markets Law No. 26,831, as amended.

#### Austria

In addition to the selling restrictions described in the section headed "Prohibition of Sales to EEA Retail Investors" (in particular the restrictions/requirements stipulated by the Prospectus Regulation), the notes may be offered in Austria only in compliance with the provisions of the Austrian Capital Market Act 2019 (*Kapitalmarktgesetz 2019*, Federal Law Gazette No 62/2019, as amended, the "KMG 2019"), which may require the filing of a notification pursuant to section 24 of the KMG 2019 with the Austrian Control Bank (*Oesterreichische Kontrollbank Aktiengesellschaft*) as soon as possible, but in any event prior to the commencement of the relevant offer of the notes.

In addition, any offer and sale of the notes must be made in compliance with the provisions of the Austrian Securities Supervision Act 2018 (*Wertpapieraufsichtsgesetz 2018*, Federal Law Gazette No 107/2017, as amended) and all other applicable legislation and regulations in Austria.

### The Bahamas

The notes may not be offered or sold in or from within The Bahamas unless the offer or sale is made by a person appropriately licensed or registered to conduct securities business in or from within The Bahamas.

The notes may not be offered or sold to persons or entities designated or deemed resident in The Bahamas pursuant to the Exchange Control Regulations, 1956 of The Bahamas unless the prior approval of the Central Bank of The Bahamas is obtained.

No offer or sale of the notes may be made in The Bahamas unless a preliminary prospectus and a prospectus have been filed with the Securities Commission of The Bahamas and the Securities Commission of The Bahamas has issued a receipt for each document, unless such offering is exempted pursuant to the Securities Industry Act, 2011 and the Securities Industry Regulations, 2012. This Base Prospectus has not been registered with the Securities Commission of The Bahamas, nor have any applications been made to exempt such offer from the filing of a prospectus with the Securities Commission

of The Bahamas under the Securities Industry Act, 2011. No offer or sale of any Securities of the Issuer can be made in The Bahamas unless the offer of the Securities is made by or through a firm which is registered with the Securities Commission of The Bahamas to engage in the business of dealing in securities in The Bahamas and in compliance with Bahamian Exchange Control Regulations.

### Belgium

For selling restrictions in respect of Belgium, please see "Prohibition of Sales to EEA Retail Investors" above.

This Base Prospectus has not been submitted for approval to the Financial Services and Markets Authority. Accordingly, investment instruments (as defined in the law of 11 July 2018 on offerings to the public of investment instruments and the admission of investment instruments to trading on regulated markets, as amended or replaced from time to time (the "**Prospectus Law**")) that do not qualify as securities (as defined in the Prospectus Regulation), including notes that have a maturity of less than 12 months and qualify as money market instruments, and that therefore fall outside the scope of the Prospectus Regulation, may not be distributed in Belgium by way of an offering to the public, as defined in and subject to the exemptions set out in the Prospectus Law.

Any offeror of notes will be required to represent and agree that it will not offer for sale, sell or market notes to any person qualifying as a consumer within the meaning of Article I.1.2 of the Belgian Code of Economic Law, as amended from time to time, unless such offer, sale or marketing is made in compliance with this Code and its implementing regulation.

### Brazil

The notes may not be offered or sold to the public in Brazil. Accordingly, the notes have not been and will not be registered with the Brazilian Securities and Exchange Commission (Comissão de Valores Mobiliários), nor have they been submitted to the foregoing agency for approval. Documents relating to the notes, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of notes is not a public offering of securities in Brazil, nor used in connection with any offer for subscription or sale of securities to the public in Brazil. A seller of the notes may be asked by the purchaser to comply with procedural requirements to evidence previous title to the notes and may be subject to Brazilian tax on capital gains which may be withheld from the sale price. Persons wishing to offer or acquire the notes within Brazil should consult with their own counsel as to the applicability of these registration requirements or any exemption therefrom.

### British Virgin Islands ("BVI")

This Base Prospectus is not an offer to sell, or a solicitation or invitation to make offers to purchase or subscribe for, the notes or any other securities or investment business services in the BVI. This Base Prospectus may not be sent or distributed to persons in the BVI and the notes are not available to, and no invitation or offer to subscribe, purchase or otherwise acquire the notes will be made to, persons in the BVI. However, the notes may be offered and sold to business companies incorporated in the BVI and international limited partnerships formed in the BVI, provided that any such offering and sale is made outside the BVI or the notes may be offered and sold as is otherwise permitted by BVI legislation.

Although not currently in force, it is possible that Part II of the Securities and Investment Business Act, 2010 of the BVI ("SIBA") will be brought into force and become law in the BVI in the near future. Upon Part II of SIBA coming into force, the notes may not, and will not, be offered to the public or to any person in the BVI for purchase or subscription by or on behalf of The Goldman Sachs Group, Inc. The notes may continue to be offered to business companies incorporated in the BVI and international limited partnerships formed in the BVI, but only where the offer will be made to, and received by, the relevant company or limited partnership outside of the BVI. Once Part II of SIBA comes into force, the notes may also be offered to persons located in the BVI who are "qualified investors" for the purposes of SIBA.

This Base Prospectus has not been reviewed or approved by, or registered with, the Financial Services Commission of the BVI and will not be so registered upon Part II of SIBA coming into force.

### Bulgaria

For selling restrictions in respect of Bulgaria, please see "Prohibition of Sales to EEA Retail Investors" above.

### Cayman Islands

Goldman Sachs International and each further dealer or offeror of the notes has represented and agreed, and each further dealer appointed under the program will be required to represent and agree, that it shall not offer and sell notes from a place of business within the Cayman Islands (including an offering from an internet or other electronic service provider located in the Cayman Islands) or in a manner constituting the establishment of a place of business or the commencement of business in the Cayman Islands unless it is appropriately registered and licensed or otherwise permitted to undertake such an offer or sale under applicable laws (including, without limitation, the Securities Investment Business Law (2020 Revision) (as amended) of the Cayman Islands).

Goldman Sachs International and each further dealer or offeror of the notes may therefore offer and sell notes to investors registered and incorporated in the Cayman Islands without restriction on such dealer or The Goldman Sachs Group, Inc. if such dealer and The Goldman Sachs Group, Inc. is, according to applicable Cayman Islands law, not located in the Cayman Islands (as a branch, an incorporated entity, a resident or otherwise) and does not have a place of business in and/or has not commenced the carrying on of business in the Cayman Islands.

No notes may be sold by or on behalf of The Goldman Sachs Group, Inc. within the Cayman Islands if such sale would require The Goldman Sachs Group, Inc. to be registered as a foreign company under the Companies Law (2020 Revision) of the Cayman Islands.

None of the notes shall be sold to or offered by way of subscription to any member of the public in the Cayman Islands whether directly or indirectly.

### Chile

The Goldman Sachs Group, Inc. and the notes have not been, and will not be, registered with the Chilean Commission for the Financial Market (Comisión para el Mercado Financiero, "CMF") pursuant to Law No. 18.045 (Ley de Mercado de Valores, "Securities Market Act"), as amended, of the Republic of Chile and, accordingly, no person shall offer or sell the notes within Chile or to, or for the account or benefit of, persons in Chile except in circumstances which have not resulted and will not result in a public offering and/or in the conduct of intermediation (functiones de intermediación) within the meaning of Chilean Iaw.

The offer of any notes pursuant to this Base Prospectus begins on the date of issuance of the relevant Final Terms. Any such offer of notes complies with General Rule N°. 336 of the CMF. Since the notes to which an offer relates have not been registered in the Foreign Securities Registry of the CMF, they are not subject to the supervision of such entity. As any offer of notes pursuant to this Base Prospectus does not relate to registered securities, there is no obligation on The Goldman Sachs Group, Inc. to deliver in Chile public information regarding the notes. The notes may not be publicly offered in Chile as long as they are not registered in the corresponding Securities Registry.

The above paragraph has to be reproduced in Spanish in order to comply with the General Rule N°. 336. Therefore, the following paragraph is only a translation into Spanish of this paragraph's disclaimers and does not contain any additional statement.

Esta oferta comienza el día que se emitan los final terms. Esta oferta de valores cumple con la Norma de Carácter General 336 de la CMF. Dado que esta oferta versa sobre valores no inscritos en el Registro de Valores Extranjeros que lleva dicha Comisión, tales valores no están sujetos a la fiscalización

de ésta. Como esta oferta de valores se refiere a valores no inscritos, no existe la obligación por parte de su emisor de entregar en Chile información pública respecto de dichos valores. Estos valores no podrán ser objeto de oferta pública mientras no sean inscritos en el Registro de Valores correspondiente.

### Colombia

This Base Prospectus, together with the Final Terms for each issue of Securities, is for the sole and exclusive use of the addressee as a determined individual/entity, and cannot be understood as addressed or be used by any third party, including but not limited to third parties for which the addressee can legally or contractually represent, nor any of its shareholders, administrators or by any of the employees of the addressee. Any material to be delivered in Colombia or to any person located, domiciled or established in Colombia, shall be for the sole and exclusive use of the recipient.

This Base Prospectus, together with the Final Terms for each issue of Securities, has not been and will not be filed with or approved by the Colombian Financial Superintendency or any other regulatory authority in Colombia.

The issuance of the notes, its trading and payment shall occur outside Colombia; therefore the notes have not been and will not be registered before the Colombian National Registry of Issuers and Securities, nor with the Colombian Stock Exchange. The delivery of this Base Prospectus or the Final Terms for each issue of Securities does not constitute a public offer of securities under the laws of Colombia. This Base Prospectus, together with the Final Terms for each issue of Securities, does not constitute and may not be used for, or in connection with, a public offering as defined under Colombian law and shall be valid in Colombia only to the extent permitted by Colombian law. Under Colombian regulations, any offering addressed to 100 or more named individuals or companies shall be deemed to be an offering to the public requiring the prior approval of the Colombian Financial Superintendency and listing on the Colombian National Registry of Issuers and Securities.

The notes may not be solicited, publicly offered, transferred, sold or delivered, whether directly or indirectly, to any individual or legal entity in Colombia.

The addressee acknowledges the Colombian laws and regulations (including but not limited to foreign exchange and tax regulations) applicable to any transaction or investment made in connection with this Base Prospectus or the Final Terms for each issue of Securities and acknowledges and represents that it is the sole responsible party for full compliance with any such laws and regulations. Additionally, Colombian investors are solely liable for conducting an investment suitability analysis as per their applicable investment regime.

### Croatia

For selling restrictions in respect of Croatia, please see also "Prohibition of Sales to EEA Retail Investors" above.

This Base Prospectus has not been, and no prospectus in relation to the program or this offer, has been or will be approved by the Croatian Financial Services Supervisory Authority (*Hrvatska agencija za nadzor financijskih usluga*) and/or published in Croatia pursuant to the Prospectus Regulation and the Croatian Capital Market Act (*Zakon o tržištu kapitala*, Official Gazette No 65/2018, as amended from time to time; "ZTK"). Neither this Base Prospectus nor any other document connected therewith may be distributed, passed on or disclosed to any person in Croatia, unless it has been approved by the competent authority of another EEA Member State, published pursuant to the Prospectus Regulation and validly passported to Croatia.

No action has been taken that would constitute a public offering of the securities or distribution of any offering material in relation to the securities in Croatia. Goldman Sachs International and each further dealer or offeror of the securities has represented and agreed, and each further dealer appointed under this program will be required to represent and agree, that it will offer or distribute the securities in Croatia only in compliance with the terms of the Prospectus Regulation, the ZTK and all other laws and regulations applicable to the offer and sale of the securities in Croatia as amended from time to time.

# Costa Rica

Any offer of notes under this Base Prospectus will be an individual and private offer which is made in Costa Rica upon reliance on an exemption from registration before the General Superintendence of Securities ("SUGEVAL"), pursuant to articles 6 and 7 of the Regulations on the Public Offering of Securities (*Reglamento sobre Oferta Pública de Valores*).

This offering is NOT a public offering of securities in Costa Rica.

The product being offered is not intended for the Costa Rican public or market and neither is it registered or will be registered before the SUGEVAL, nor can it be traded in the secondary market.

### Czech Republic

For selling restrictions in respect of the Czech Republic, please see "Prohibition of Sales to EEA Retail Investors" above, with the following exceptions:

"Qualified investors" for the purpose of a Czech offering are (a) persons specified in Article 2a paragraph 1 and 2 of Act No. 256/2004 Coll., on Capital Markets Undertakings, as amended (the "Czech Capital Markets Act") and/or (b) persons who are considered as professional customers under Article 2b of the Czech Capital Markets Act, to the extent of trading or investment instruments relating to the offered notes.

The monetary amount relevant for the exemption from the obligation to publish a prospectus under Article 1(4)(c) and 1(4)(d) of the Prospectus Regulation is determined by the applicable governmental regulations, as amended and/or replaced from time to time.

## Denmark

This Base Prospectus has not been filed with or approved by the Danish Financial Supervisory Authority or any other regulatory authority in the Kingdom of Denmark. The notes have not been offered or sold and may not be offered, sold or delivered directly or indirectly in Denmark, unless in compliance with, as applicable, the Prospectus Regulation, the Danish Consolidated Act No. 1767 of 27 November 2020 on Capital Markets and Executive Orders issued thereunder and in compliance with Executive Order No. 2029of 14 December 2020 on investor protection in connection with securities trading, issued pursuant to the Danish Consolidated Act No. 1447 of 11 September 2020 on Financial Business, all as amended, supplemented or replaced from time to time.

### Dominican Republic

The issuance, circulation and offering of the notes has a strictly private character according to the laws of the Dominican Republic, falling beyond the scope of articles 1 numeral (31), 46 et al of Law 249-17 dated 19 December 2017, as amended. Since no governmental authorisations are required in this issuance, circulation and offering, the notes under this Base Prospectus have not been and will not be registered with the Superintendency of the Stock Market of the Dominican Republic (*Superintendencia del Mercado de Valores de la República Dominicana*), considering that and notes will only be circulated, offered and sold in the Dominican Republic in a private manner based on the criteria established under Dominican laws and regulations.

# Dubai International Financial Centre

This Base Prospectus relates to an Exempt Offer in accordance with the Markets Rules of the Dubai Financial Services Authority (the "DFSA").

This Base Prospectus is intended for distribution only to Professional Clients (as defined in the DFSA Rules, as amended) who are not natural persons. It must not be delivered to, or relied on by, any other person.

The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this Base Prospectus nor taken steps to verify the information set out in it, and has no responsibility for it.

The notes to which this Base Prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the notes offered should conduct their own due diligence on the notes.

If you do not understand the contents of this Base Prospectus you should consult an authorised financial adviser.

### El Salvador

This Base Prospectus has been provided to the recipient under the recipient's express request and instructions, and on a **private placement basis**.

#### Finland

For selling restrictions in respect of Finland, please see "Prohibition of Sales to EEA Retail Investors" above.

This Base Prospectus has not been filed with or approved by the Finnish Financial Supervisory Authority. The notes may only be offered or sold in compliance with all applicable provisions of the laws of Finland and especially in compliance with the Finnish Securities Market Act (arvopaperimarkkinalaki (746/2012), as amended) and any regulation or rule made thereunder, as supplemented and amended from time to time.

### France

For selling restrictions in respect of France, please see "Prohibition of Sales to EEA Retail Investors" above.

#### Germany

For selling restrictions in respect of Germany, please see "Prohibition of Sales to EEA Retail Investors" above.

#### Greece

This Base Prospectus (and/or any supplement and/or final terms thereto) has not been approved by the Hellenic Capital Markets Commission for the offer, distribution and marketing of the notes in Greece. For selling restrictions in respect of Greece, please see "Prohibition of Sales to EEA Retail Investors" above.

### Hong Kong

No advertisement, invitation or document relating to the notes may be issued, or may be in the possession of any person for the purpose of issue, (in each case whether in Hong Kong or elsewhere), if such advertisement, invitation or document is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to notes which are or are intended to be disposed of only to persons outside of Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong, the "SFO") and any rules made thereunder. In addition, in respect of notes which are not a "structured product" as defined in the SFO, the notes may not be offered or sold by means of any document other than (i) to "professional investors" within the meaning of the SFO and any rules made thereunder; or

(ii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap 32, Laws of Hong Kong, the "CO") or which do not constitute an offer to the public within the meaning of the CO.

Unless (a) the notes are not linked to an Underlying Asset or do not otherwise include a derivative and/or (b) you are an institution or are otherwise an institutional or an eligible corporate professional investor which satisfies requirements under the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission for whom an assessment of the suitability of the Securities for you by the selling intermediary is not required under applicable Hong Kong laws, regulations and rules, you should take note of the following warning:

This is a structured product involving derivatives. The investment decision is yours but you should not invest in the notes unless the intermediary who sells it to you has explained to you that the product is suitable for you having regard to your financial situation, investment experience and investment objectives.

Where the notes are not linked to any Underlying Asset or do not otherwise include a derivative, if you are not an institution or an institutional or an eligible corporate professional investor which satisfies requirements under the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission for whom an assessment of the suitability of the Securities for you by the selling intermediary is not required under applicable Hong Kong laws, regulations and rules, you should take note of the following warning:

This is an investment product. The investment decision is yours but you should not invest in the notes unless the intermediary who sells it to you has explained to you that the product is suitable for you having regard to your financial situation, investment experience and investment objectives.

In either case, you should also take note of the following warning:

The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

The Issuer does not accept any responsibility for any acts or omissions of such intermediary.

### Hungary

This Base Prospectus has not been approved by the Magyar Nemzeti Bank (Hungarian National Bank).

In addition to any other general selling restrictions in this Base Prospectus (including, but not limited to restrictions under the heading "Prohibition of Sales to EEA Retail Investors" above), the following restrictions also apply to an offer notes to the public in Hungary of contemplated by this Base Prospectus as completed by the relevant final terms. The expression an "offer of notes to the public" shall have the same meaning as defined under the heading "Prohibition of Sales to EEA Retail Investors".

Any offer of notes to the public in Hungary is authorized only if all rules specified in the laws and regulation of Hungary and the European Union (especially, but not limited to the Prospectus Regulation and Sections 13 to 51 of Hungarian Act CXX of 2001 on the Capital Market Act (the "Capital Market Act"),

as amended from time to time) are fully complied with and no further obligations or sanctions arise for the Issuer, The Goldman Sachs Group, Inc.

## Private placement

A placement of such notes in Hungary that is

- (i) neither an offer of securities to the public pursuant to the Prospectus Regulation
- (ii) nor the admission of such notes to trading on a regulated market;

qualifies as a private placement (zártkörű forgalombahozatal) in Hungary.

An offer of notes to the public in Hungary by way of a private placement is authorized only (and without prejudice to compliance with any other applicable restriction) if all rules specified in the Capital Market Act are complied with, which requires, among others,

- in Section 16 of the Capital Market Act, the equal distribution (by the Issuer or the dealer) of information to all investors on the material information of the market, economic, financial and legal situation and prospects of the Issuer and the information necessary to assess the rights attaching to the underlying instruments (including information raised in personal discussions with investors)

- in Section 17 of the Capital Market Act, that the private placement in Hungary is subsequently notified to the Hungarian National Bank within 15 days of completion by the Issuer (The Goldman Sachs Group, Inc.);

- in Section 18 of the Capital Market Act, that each and any written document related to the offer of notes to the public must clearly indicate that such offer is a private placement.

### Additional obligations in respect of exempt offers of securities to the public

An offer of notes to the public that is falling within any of paragraphs a), b), c), d), e) or j) of Article 1(4) of the Prospectus Regulation is only authorized in Hungary if the rules specified in Section 16 of the Capital Market Act (applicable through Section 21 (1c) of the Capital Market Act and partially summarized above) are fully complied with (without prejudice to compliance with any other applicable restriction).

An offer of notes to the public that is falling within Article 1(4) or any of paragraphs a) – h) of Article 1(5) of the Prospectus Regulation is only authorized in Hungary if the Issuer, The Goldman Sachs Group, Inc. agrees and undertakes to duly notify the Hungarian National Bank about the Offer in Hungary subsequently within 15 days of completion (pursuant to Section 17 of the Capital Market Act; applicable through Section 21 (1c) of the Capital Market Act) (without prejudice to compliance with any other applicable restriction).

If the offer of notes to the public in Hungary is not exempt from the obligation of the Issuer to engage an appropriately licensed investment service provider under Section 23 (1) of the Capital Market Act, any offer of notes to the public is only authorized in Hungary if the Issuer, The Goldman Sachs Group, Inc. agreed and engaged an investment service provider fully in accordance with Section 23 (1) of the Capital Market Act.

### Registration in a multilateral trading facility

The registration of notes which are the subject of the offering contemplated by this Base Prospectus as completed by the relevant final terms in a multilateral trading facility or the publication of selling and

purchase prices is not authorized in Hungary unless in compliance the Capital Markets Act and other Hungarian laws and regulations as amended from time to time.

## Ireland

- In addition to the circumstances referred to in the section entitled "Prohibition of Sales to EEA Retail Investors", Goldman Sachs International will be required to represent, warrant and agree that it has not offered, sold, placed or underwritten and that it will not offer, sell, place or underwrite the notes, or do anything in Ireland in respect of the notes, otherwise than in conformity with the provisions of:
- Regulation (EU) 2017/1129 (the Prospectus Regulation), Commission Delegated Regulation (EU) 2019/980 (PR Regulation), Commission Delegated Regulation (EU) 2019/989 (RTS Regulation) and Central Bank of Ireland ("Central Bank") rules issued and / or in force pursuant to Section 1363 of the Companies Act 2014 (as amended);
- (ii) the Companies Act 2014 (as amended);
- (iii) the European Union (Markets in Financial Securities) Regulations 2017 (as amended) and it will conduct itself in accordance with any rules or codes of conduct and any conditions or requirements, or any other enactment, imposed or approved by the Central Bank;
- (iv) Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse, the European Union (Market Abuse Regulations 2016 and any Central Bank rules issued and / or in force pursuant to Section 1370 of the Companies Act 2014 (as amended), and will assist The Goldman Sachs Group, Inc. in complying with its obligations thereunder;
- (v) the Central Bank Acts 1942 to 2018 (as amended) and any codes of conduct rules made under Section 117(1) of the Central Bank Act 1989; and
- (vi) the PRIIPs Regulation.

# Italy

The below selling restrictions shall apply unless the final terms in respect of any notes specifies the "Prohibition of Sales to EEA Retail Investors" as "Not Applicable". Please see the section "Prohibition of Sales to EEA Retail Investors" above.

In addition to the restrictions under section "Prohibition of Sales to EEA Retail Investors" above, the offering of the notes has not been registered pursuant to Italian securities legislation and, accordingly, no notes may be offered, sold or delivered, nor may copies of this Base Prospectus or of any other document relating to the notes be distributed in the Republic of Italy, except:

- to qualified investors (*investitori qualificati*), as defined under Article 2, paragraph 1, letter e), of Regulation (EU) No. 1129 of 14 June 2017 (the "Prospectus Regulation") and any applicable provision of Legislative Decree No. 58 of 24 February 1998, as amended from time to time (the "Financial Services Act") and/or Italian CONSOB regulations; or
- (ii) in other circumstances which are exempted from the rules on public offerings pursuant to Article 1 of the Prospectus Regulation, Article 34-*ter* of CONSOB regulation No. 11971 of 14 May 1999, as amended from time to time (the "CONSOB Regulation No. 11971"), and in accordance with any applicable Italian laws and regulations.

Any offer, sale or delivery of the notes or distribution of copies of this Base Prospectus or any other document relating to the notes in the Republic of Italy must be made in compliance with the selling restrictions under points (i) or (ii) above and must be made:

- (a) by soggetti abilitati (including investment firms, banks or financial intermediaries), as defined by Article 1, first paragraph, letter r), of the Financial Services Act, permitted to conduct such activities in the Republic of Italy in accordance with the relevant provisions of the Financial Services Act, CONSOB regulation No. 20307 of 15 February 2018, as amended from time to time, and Legislative Decree No. 385 of 1 September 1993, as amended from time to time (the "Banking Act") and any other applicable laws and regulations;
- (b) in compliance with Article 129 of the Banking Act, as amended from time to time, and the implementing guidelines of the Bank of Italy issued on 25 August 2015 and amended on 10 August 2016, as further amended from time to time, pursuant to which the Bank of Italy may request periodic reporting, data and information on the issue or the offer of securities in the Republic of Italy; and
- (c) in compliance with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy and/or any other competent authority.

Please note that in accordance with Article 100-bis of the Financial Services Act, where no exemption from the rules on public offerings applies under (i) and (ii) above, the subsequent resale of the notes on the secondary market in the Republic of Italy must be made in compliance with the public offer and the prospectus requirement rules provided under the Financial Services Act and CONSOB Regulation No. 11971. For these purposes, a public offer occurs also where the notes which are initially offered and placed in the Republic of Italy or abroad to qualified investors only but, at any time in the 12 months following such placing, are regularly ("sistematicamente") resold on the secondary market in the Republic of Italy to non-qualified investors. Where no exemption from the rules on public offerings applies, failure to comply with the prospectus requirement rules provided under the Financial Services Act and CONSOB Regulation No. 11971 may result in the purchasers of the notes who are acting outside of the course of their business or profession being entitled to declare such purchase void and to claim damages from any authorised intermediary from which the notes were purchased.

### Japan

The notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Law No. 25 of 1948, as amended, the "FIEA") and, accordingly, Goldman Sachs International and each further dealer or offeror of the notes has agreed and each further dealer to be appointed under the program will be required to agree that it will not offer or sell any notes, directly or indirectly, in Japan, or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organised under the laws of Japan), or to others for reoffering or resale, directly or indirectly, in Japan or to any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

#### Jersey

No consent of the Jersey Financial Services Commission under Article 8(2) of the Control of Borrowing (Jersey) Order 1958 has been obtained for the circulation in Jersey of any offer for subscription, sale or exchange of notes and any such offer must be addressed exclusively to a restricted circle of persons in Jersey. For these purposes an offer is not addressed exclusively to a restricted circle of persons unless (i) the offer is addressed to an identifiable category of persons to whom it is directly communicated by the offeror or the offeror's appointed agent, (ii) the members of that category are the only persons who may accept the offer and they are in possession of sufficient information to be able to make a reasonable evaluation of the offer and (iii) the number of persons in Jersey to whom the offer is so communicated does not exceed 50.

### Liechtenstein

For selling restrictions in respect of Liechtenstein, please see "Prohibition of Sales to EEA Retail Investors" above.

#### Luxembourg

For selling restrictions in respect of Luxembourg, please see "Prohibition of Sales to EEA Retail Investors" above.

#### Mexico

The notes have not been and will not be registered with the Mexican National Securities Registry (*Registro Nacional de Valores*), maintained by the Mexican National Banking and Securities Commission (*Comisión Nacional Bancaria de Valores*), and may not be publicly offered or sold in Mexico, except that the notes may be offered and sold, on a private placement basis, in Mexico, by any person, including The Goldman Sachs Group, Inc. or its affiliates, to investors that qualify as institutional and accredited investors in Mexico, pursuant to the private placement exemption set forth in Article 8 of the Mexican Securities Market Law (*Ley del Mercado de Valores*).

#### Norway

For selling restrictions in respect of Norway, please see "Prohibition of Sales to EEA Retail Investors" above.

In no circumstances may an offer of notes denominated in NOK be made in the Norwegian market without the Instruments or Notes being registered in the VPS in dematerialised form or in another central securities depository which is properly authorised and recognised by the Financial Supervisory Authority of Norway (Nw. Finansilsynet) as being entitled to register the Instruments or Notes pursuant to Regulation (EU) No 909/2014, to the extent such Instruments or Notes shall be registered, according to the Norwegian Central Securities Depositories Act (Nw. Verdipapirsentralloven 2019) and ancillary regulations.

#### Panama

The notes have not been and will not be Registered with the Superintendence of Capital Markets of the Republic of Panama under Decree Law No.1 of July 8, 1999 (as amended to date, the "Panamanian Securities Act") and may not be publicly offered or sold within Panama, except in certain limited transactions exempt from the registration requirements of the Panamanian Securities Act. These notes do not benefit from the tax incentives provided by the Panamanian Securities Act and are not subject to regulation or supervision by the Superintendence of Capital Markets of the Republic of Panama.

Institutional investors that purchase the notes pursuant to the institutional investor exemption must hold the notes for a year and during that period may only sell these notes to other institutional investors.

Neither the Securities nor the offer, sale or transactions related to the same have been registered with the Superintendence of Capital Markets. The exemption from registration is based on paragraph (3) of Article 129 of the Amended and Restated Text of Law Decree N°1 of July 8, 1999 (institutional investors). Accordingly, the tax treatment set forth in Articles 334 thru 336 of said Amended and Restated Text of Law Decree N°1 of July 8, 1999 is not applicable. The Securities are not subject to the supervision of the Superintendence of Capital Markets.

#### Paraguay

This Base Prospectus does not constitute a public offering of notes or other financial products and services in Paraguay. Each purchaser of notes acknowledges that the notes and financial products to be offered under this Base Prospectus will be issued outside of Paraguay. Each purchaser of notes acknowledges that any legal matter arising from any offer of notes shall not be submitted to any Paraguayan government authority. Each purchaser of notes acknowledges as well that the Paraguayan Deposit

Insurance legislation does not cover the products offered hereby or assets or funds allocated for these purposes. The Paraguayan Central Bank, the Paraguayan National Stock Exchange Commission and the Paraguayan Banking Superintendence do not regulate the offering of these products or their undertaking. Each purchaser of notes should make his own decision whether this offering meets his investment objectives and risk tolerance level.

## Peru

The notes and this Base Prospectus have not been registered in Peru under the *Decreto Supremo N*<sup>o</sup> 093-2002-*EF*: *Texto* Único Ordenado de la Ley del Mercado de Valores (the "Peruvian Securities Law") nor have they been approved by the *Superintendencia del Mercado de Valores* and cannot be offered or sold in Peru except in a private offering under the meaning of the Peruvian Securities Law. The Peruvian Securities Law provides that an offering directed exclusively to "institutional investors" (as defined in the Institutional Investors Market Regulations) qualifies as a private offering. The notes acquired by institutional investors in Peru cannot be transferred to a third party, unless such transfer is made to another institutional investor or the notes have been previously registered with the *Registro Público del Mercado de Valores* maintained by the *Superintendencia del Mercado de Valores*.

# Poland

In addition to provisions applicable to the "Prohibition of Sales to EEA Retail Investors" stated above, the following applies:

With respect to the offer, delivery, advertisement or sale of the notes no approval has been sought or obtained from the Polish Financial Supervision Authority (*Komisja Nadzoru Finansowego*) and the offer, delivery, advertisement or sale of the notes was not notified to the Polish Financial Supervision Authority (*Komisja Nadzoru Finansowego*).

Any offer, delivery, advertisement or sale of the notes or distribution of copies of this Base Prospectus, any final terms or any other document relating to the notes to the public in Poland must be made in accordance with:

- (a) the Prospectus Regulation;
- (b) the Polish Act on Public Offers and Conditions of Introducing Financial Instruments to Organised Trading and on Public Companies of 29 July 2005 (as amended) ("Act on Public Offers");
- (c) the Polish Act on Trading in Financial Instruments of 29 July 2005 (as amended); and
- (d) any other applicable laws and regulations or requirement imposed by the Polish Financial Supervision Authority (*Komisja Nadzoru Finansowego*) or other Polish authority.

In particular, according to Article 3 Section 1(a) of the Act on Public Offers, an offer of securities to the public referred to in Article 1 Section 4(b) of the Prospectus Regulation, in the case of which the number of persons to whom it is directed together with the number of persons to whom public offers referred to in Article 1 Section 4(b) of Prospectus Regulation were directed, of the same type of securities, carried out over the past 12 months, exceeds 149, requires that an information memorandum referred to in Article 38b of the Polish Act on Public Offers shall be published, which is subject to the Polish Financial Supervision Authority's (*Komisja Nadzoru Finansowego*) approval.

The provision under Article 3 Section 1(a) of the Act on Public Offers is not applicable if the offer is directed solely to the holders of the same type of securities of the same issuer or to entities which were offered the issuer's securities by way of exchanging receivables from the redemption of the previously issued securities of the issuer.

Moreover, according to the Act on Public Offers, advertisements of an offer of securities to the public referred to in Article 1 Section 4(b) of the Prospectus Regulation may only be disseminated to less

than 150 persons in the territory of one Member State and cannot be made available to an unknown recipient.

If, pursuant to the provisions of the Prospectus Regulation, it is not required to make the prospectus available, the advertisements should be consistent with the information included in the information memorandum or any other document required under the Act on Public Offers or the Prospectus Regulation, made available to the public, or with information which should be included in the memorandum or in the document pursuant to the provisions of the Act on Public Offers, the Prospectus Regulation and delegated and implementing acts issued on the basis thereof, if the information memorandum or such document have not yet been made available to the public, and they cannot mislead investors in respect of the issuer's situation and the assessment of the securities.

### Portugal

The notes may only be offered in Portugal in compliance with the provisions of the Portuguese Securities Code (*Código dos Valores Mobiliários*, approved by the Decree-Law 486/99, of November 13, as amended) and other laws and regulations applicable to the offer and sale of the Securities in Portugal. This Base Prospectus has not been verified by the Portuguese Securities Exchange Commission (*Comissão do Mercado de Valores Mobiliários*, or the "CMVM") and the notes are not registered therewith for public offer in Portugal. The recipients of this Base Prospectus and other offering materials in respect of the notes are professional investors, targeted exclusively on the basis of a private placement, all as defined in and in accordance with articles 30, 109 and 110 of the Portuguese Securities Code. Accordingly, the notes must not be, and are not being, offered or advertised, and no offering or marketing materials relating to the notes may be made available or distributed in any way that would constitute a public offer under the Portuguese Securities Code (whether at present or in the future).

### Romania

For selling restrictions in respect of Romania, please see "Prohibition of Sales to EEA Retail Investors" above.

The Base Prospectus has not been subject to the approval of the Romanian Financial Supervisory Authority ("**ASF**") or any other competent Romanian authority. Accordingly, the Issuer and each dealer have represented and agreed that it has not offered, sold or delivered, and will not offer, sell or deliver, any notes in Romania ("**Romania**") in a solicitation to the public, and that sales of the notes in Romania shall be effected in accordance with all Romanian securities, tax and exchange control and other applicable laws and regulations.

For the cases when a valid pass porting procedure to Romania in relation to the Base Prospectus has not been successfully enacted, the Issuer and each of the dealers has represented and agreed that it will not offer, sell or deliver any notes or distribute copies of the Base Prospectus or any other document relating to the notes in Romania except for the cases when the Base Prospectus and any related documents relating to the notes will be offered in Romania observing the following cumulative conditions:

- (a) it is addressed only to investors who are "**qualified investors**" within the meaning of Article 2 e) of the Prospectus Regulation;
- (b) it complies with all applicable laws and regulations in Romania, including the Prospectus Regulation, the provisions of Law no. 24/2017 as regards issuers of financial instruments and market operations, the provisions of Regulation No. 5/2018 on issuers of financial instruments and market operations issued by the Romanian Financial Supervisory Authority, and any norms and decisions issued or approved by the Romanian Financial Supervisory Authority or any other competent Romanian authority, as well as any other applicable EU and Romanian legislation.

### Saudi Arabia

No action has been or will be taken in the Kingdom of Saudi Arabia that would permit a public offering of the notes. Any investor in the Kingdom of Saudi Arabia or who is a Saudi person (a "Saudi Investor") who acquires any notes pursuant to any offering should note that the offer of notes is a private placement under Article 8 or Article 9, or Article 10, or Article 11 or Article 12 of the "Rules on the Offer of

Securities and Continuing Obligations" as issued by the Board of the CMA pursuant to its resolution number 3-123-2017 dated 9/4/1439H corresponding to 27/12/2017G amended by Resolution of the Board of the CMA number 1-104-2019 dated 01/02/1441H corresponding to 30/09/2019G (the "**KSA Regulations**") for the purposes of Article 10 of the KSA Regulations through a person authorised by the CMA to carry on the securities activity of arranging and following a notification to the CMA under the KSA Regulations.

The notes may thus not be advertised, offered or sold to any person in the Kingdom of Saudi Arabia other than to "sophisticated investors" under Article 9 of the KSA Regulations or by way of a limited offer under Article 10 of the KSA Regulations. Goldman Sachs International and each further dealer or offeror of the notes has represented and agreed, and each further dealer appointed under the program will be required to represent and agree, that any offer of notes will comply with the KSA Regulations.

Each offer of notes shall not therefore constitute a "public offer" pursuant to the KSA Regulations, but is subject to the restrictions on secondary market activity under Article 15 of the KSA Regulations. Any Saudi Investor who has acquired notes pursuant to a private placement under Article 11, Article 9 or Article 10 or is an Exempt offer under Article 6 of the KSA Regulations may not offer or sell those notes to any person unless the offer or sale is made through an authorised person appropriately licensed by the CMA and where one of the following requirements is met:

- (a) An offer of securities is a limited offer if at the subscription is limited to no more than 100 offerees (excluding sophisticated investors) and the minimum amount payable per offeree is not less than one million SR or an equivalent amount. The minimum amount payable per offeree may be less than one million SR where the total value for the offered securities does not exceed five million SR;
- (b) Securities of the same class may not be offered as a limited offer under paragraph (a) of this Article more than once in a twelve-month period ending with the date of the offer in question;
- (c) the offer is an exempt offer;
- (d) the securities are offered or sold to a sophisticated investor; or
- (e) the securities are being offered or sold in such other circumstances as the CMA may prescribe for these purposes.

All the above restrictions shall cease to apply upon approval of listing on the Saudi Stock Exchange of securities of the same class as the Securities that are subject to such restrictions.

If the requirement in paragraph (a) above cannot be fulfilled because the price of the Securities being offered or sold to the transferee has declined since the date of the original private placement, the transferor may offer or sell the Securities to the transferee if their purchase price during the period of the original private placement was equal to or exceeded Saudi Riyals one million or an equivalent amount. If this requirement cannot be fulfilled, a Saudi Investor may offer or sell the Securities if he sells his entire holding of such Securities to one person.

All the above provisions shall apply to all subsequent transferees of such notes.

### Singapore

This Base Prospectus has not been registered as a prospectus with the Monetary Authority of Singapore (the "MAS") under the Securities and Futures Act, Chapter 289 of Singapore, as amended or modified (the "SFA").

Where the notes are:

(i) linked to underlying assets which are shares (other than units of a collective investment scheme) of a corporation (whether incorporated in Singapore or

elsewhere), debentures of an entity, units in a business trust or any instrument conferring or representing a legal or beneficial ownership interest in a corporation, partnership or limited liability partnership formed in Singapore or elsewhere (each of the foregoing, an "SFA security"), or any derivatives contract of which the underlying thing or any of the underlying things is a SFA security or a SFA securities index, or such other product or class of products prescribed by the MAS ("Non-CIS Reference Items"); or

(ii) linked to underlying assets which fall within the ambit of a "collective investment scheme" (as defined in the SFA) (the "CIS Reference Items"),

this Base Prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes or the Non-CIS Reference Items may not be circulated or distributed, nor may the notes or the Non-CIS Reference Items be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in the SFA) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA, and where applicable, the conditions specified in Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018 or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where notes or Non-CIS Reference Items are subscribed for or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 2(1) of the SFA) or securities-based derivatives contracts (as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the notes or Non-CIS Reference Items pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- 2) where no consideration is or will be given for the transfer;
- 3) where the transfer is by operation of law;
- 4) as specified in Section 276(7) of the SFA; or
- 5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Notes Linked to CIS Reference Items with Physical Delivery

(A) Notes linked to CIS Reference Items where the notes do not provide for a right or interest (including an option) in respect of units in a CIS Reference Item

Where the notes are linked to CIS Reference Items and do provide for a right to physical delivery of the CIS Reference Items (whether such right is contingent on the fulfilment of any condition or not), the selling restriction applicable to notes as specified above will apply to such notes linked to CIS Reference Items,

and additionally, the offer or invitation of the notes and CIS Reference Items, which is the subject of this Base Prospectus, does not relate to a collective investment scheme which is authorized under Section 286 of the SFA or recognized under Section 287 of the SFA. The Goldman Sachs Group, Inc. is not authorized or recognized by the MAS and the notes and the CIS Reference Items are not allowed to be offered to the retail public. This Base Prospectus and any other document or material issued in connection with the offer or sale is not a prospectus as defined in the SFA, and accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply, and you should consider carefully whether the investment is suitable for you.

This Base Prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the CIS Reference Items may not be circulated or distributed, nor may the CIS Reference Items be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in the SFA) under Section 304 of the SFA, (ii) to a relevant person (as defined in Section 305(5) of the SFA) pursuant to Section 305(1) or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305 of the SFA, and where applicable, the conditions specified in Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018 or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where CIS Reference Items are subscribed for or purchased under Section 305 of the SFA by a relevant person which is:

- (c) a corporation (which is not an accredited investor (as defined in the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (d) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the CIS Reference Items pursuant to an offer made under Section 305 of the SFA except:

- to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 305A(3)(i)(B) of the SFA;
- 2) where no consideration is or will be given for the transfer;
- 3) where the transfer is by operation of law;
- 4) as specified in Section 305A(5) of the SFA; or
- 5) as specified in Regulations 36 and 36A of the Securities and Futures (Offers of Investments) (Collective Investment Schemes) Regulations 2005 of Singapore.
- (B) Notes Linked to CIS Reference Items where the notes provide for a right or interest (including an option) in respect of units in a CIS Reference Item

Where the Securities are linked to CIS Reference Items and do provide for a right to physical delivery of the CIS Reference Items (whether such right is contingent on the fulfilment of any condition or not), and additionally, the Securities provide for a right or interest (including an option) in respect of units in a CIS Reference Item, the offer or invitation of the Securities and CIS Reference Items, which is the subject of this Base Prospectus, does not relate to a collective investment scheme which is authorised under Section 286 of the SFA or recognised under Section 287 of the SFA. The Programme and the Issuers are not authorised or recognised by the MAS and the Securities and the CIS Reference Items are not allowed to

be offered to the retail public. This Base Prospectus and any other document or material issued in connection with the offer or sale is not a prospectus as defined in the SFA, and accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply, and you should consider carefully whether the investment is suitable for you.

This Base Prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Securities or CIS Reference Items may not be circulated or distributed, nor may the Securities or CIS Reference Items be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in the SFA) under Section 304 of the SFA, (ii) to a relevant person (as defined in Section 305(5) of the SFA) pursuant to Section 305(1) or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305 of the SFA, and where applicable, the conditions specified in Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018 or, (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where notes or CIS Reference Items are subscribed for or purchased under Section 305 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the notes or CIS Reference Items pursuant to an offer made under Section 305 of the SFA except:

- 1) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 305A(3)(i)(B) of the SFA;
- 2) where no consideration is or will be given for the transfer;
- 3) where the transfer is by operation of law;
- 4) as specified in Section 305A(5) of the SFA; or
- 5) as specified in Regulations 36 and 36A of the Securities and Futures (Offers of Investments) (Collective Investment Schemes) Regulations 2005 of Singapore.

Any reference to the "**SFA**" is a reference to the Securities and Futures Act, Chapter 289 of Singapore and a reference to any term as defined in the SFA or any provision in the SFA is a reference to that term as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

### Slovakia

For selling restrictions in respect of Slovakia, please see "Prohibition of Sales to EEA Retail Investors" above, provided that:

"Qualified investors" for the purpose of a Slovak offering are persons specified in Article 8a paragraph 2 of Act No. 566/2001 Coll., on securities and investment services, as amended (the "**Slovak Securities Act**").

The Securities may only be offered or sold in compliance with all applicable provisions of the laws of Slovakia and especially in compliance with the Slovak Securities Act, as amended and any regulation or rule made thereunder, as supplemented and amended from time to time.

### South Africa

Each Goldman Sachs International and each further dealer or offeror of the note has (or will have) represented, warranted and agreed that it (i) will not offer notes for subscription, (ii) will not solicit any offers for subscription for or sale of the notes, and (iii) will itself not sell or offer the notes in South Africa in contravention of the South African Companies Act, 2008, the South African Banks Act, 1990, the South African Exchange Control Regulations, 1961, promulgated pursuant to the South African Currency and Exchanges Act, 1933 and/or any other applicable laws and regulations of South Africa in force from time to time.

Prior to the issue of any notes under the program, Goldman Sachs International and each further dealer or offeror of the notes who has (or will have) agreed to place those notes will be required to represent and agree that it will not make an "offer to the public" (as such expression is defined in the South African Companies Act, 2008, and which expression includes any section of the public) of notes (whether for subscription, purchase or sale) in South Africa. This Base Prospectus does not, nor is it intended to, constitute a prospectus prepared and registered under the South African Companies Act, 2008.

# Offers not deemed to be offers to the public

Offers for subscription for, or sale of, notes are not deemed to be offers to the public if:

- (a) made only to certain investors contemplated in section 96(1)(a) of the South African Companies Act, 2008; or
- (b) the total contemplated acquisition cost of notes, for any single addressee acting as principal, is equal to or greater than ZAR1,000,000, or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act, 2008.

Information made available in this Base Prospectus should not be considered as "advice" as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

### Spain

This Base Prospectus has not been and it is not envisaged to be approved by, registered or filed with, or notified to the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*).

Additionally, it is not intended for the public offering or sale of the notes in Spain and does not constitute a prospectus (registration document or notes) for the public offering of the notes in Spain. Accordingly, no notes may be offered, sold, delivered, marketed nor may copies of this Base Prospectus or any other document relating to the notes be distributed in Spain, and investors in the notes may not sell or offer such notes in Spain other than in compliance with the requirements set out by the Prospectus Regulation, articles 35 of the Royal Legislative Decree 4/2015 of 23 October of the Securities Markets (*Real Decreto Legislativo 4/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Mercado de Valores*), as amended and restated, ("**Royal Legislative Decree 4/2015**") and 38 of Royal Decree 1310/2005, of 4 November, partially developing Law 24/1988, of 28 July on admission to trading of the notes in official secondary markets, public offerings and prospectus (*Real Decreto 1310/2005, de 4 de noviembre por el que se desarrolla parcialmente la Ley 24/1988, de 28 de julio, del Mercado de Valores, en materia de admisión a negociación de valores en mercados secundarios oficiales, de ofertas públicas de venta o* 

suscripción y del folleto exigible a tales efectos), as amended and restated (the "**Royal Decree 1310/2005**") so that any sale or offering of the notes in Spain is not classified as a public offering of the notes in Spain.

The notes may not be listed, offered, sold or distributed in Spain, except in accordance with the requirements set out in the Prospectus Regulation, Royal Legislative Decree 4/2015, Royal Decree 1310/2005 or any other related regulations that may be in force from time to time, as further amended, supplemented or restated.

### Sweden

For selling restrictions in respect of Sweden, please see "Prohibition of Sales to EEA Retail Investors" above.

### Switzerland

### Prohibition of Offer to Private Clients in Switzerland

Unless the relevant Final Terms in respect of any notes specifies the "Prohibition of Offer to Private Clients in Switzerland" to be "Not Applicable", subject to the last paragraph, each purchaser and/or offeror of the notes represents and agrees that it has not offered and will not offer any notes to any Private Client in Switzerland.

For the purposes of this provision:

- 1. the expression "Private Client" means a person who is not one (or more) of the following:
  - (i) a professional client as defined in article 4 para. 3 FinSA (not having opted-in on the basis of article 5 para. 5 FinSA) or article 5 para. 1 FinSA; or
  - (ii) an institutional client as defined in article 4 para. 4 FinSA; or
  - (iii) a private client according to article 58 para. 2 FinSA.
- 2. the expression "offer" refers to the interpretation of such expression in article 58 FinSA.

Notwithstanding the above, in the case where the relevant Final Terms in respect of any notes specifies the "Prohibition of Offer to Private Clients in Switzerland" to be applicable or in the case of the next paragraph being applicable but where subsequently a key information document under article 58 FinSA (Basisinformationsblatt für Finanzinstrumente) or article 59 para. 2 FinSA in respect of the notes is published, then, following such publication, the prohibition on the offering of the notes to Private Clients in Switzerland as described above shall no longer apply.

In the case where the Final Terms in respect of any notes does specify the "Prohibition of Offer to Private Clients in Switzerland" to be "Not Applicable" but if for structured products only a simplified prospectus based on the transitory provision of article 111 FinSO has been prepared or, for leverage products, no key information document has been published, then after the expiry of the transitory period, the prohibition of the offering of the notes to Private Clients in Switzerland as described above shall automatically apply, subject to the preceding paragraph.

### The Netherlands

For selling restrictions in respect of The Netherlands, please see "Prohibition of Sales to EEA Retail Investors" above.

### United Arab Emirates (UAE)

The offering of the notes to which this Base Prospectus relates has not been approved or licensed by the UAE Central Bank, the UAE Securities and Commodities Authority (the "SCA"), the Dubai Financial Services Authority (the "DFSA") or any other relevant licensing authorities in the UAE, and accordingly does not constitute a public offer of securities in the UAE in accordance with the commercial companies law, Federal Law No. 2 of 2015 (as amended), SCA Resolution No. 9 R.M. of 2016 Concerning the Regulation of Mutual Funds (as amended) or SCA Resolution No.3 R.M. of 2017 Concerning the Organization of Promotion and Introduction (as amended) (together the "SCA Resolutions") or otherwise. Accordingly, the notes may not be offered to the public in the UAE (including the Dubai International Financial Centre).

The notes to be issued under this Base Prospectus have not been, and will not be, offered, sold, publicly promoted or advertised in the UAE other than in compliance with any laws applicable in the UAE governing the issue, offering and sale of the notes.

This Base Prospectus is strictly private or confidential and is being issued to a limited number of institutional and individual investors:

- (a) who fall within the exceptions to SCA Resolutions and/or who qualify as Qualified Investors as defined under the SCA Resolutions;
- (b) upon their request and confirmation that they understand that the Securities have not been approved or licensed by or registered with the UAE Central Bank, the SCA, the DFSA or any other relevant licensing authorities or governmental agencies in the UAE; and
- (c) must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose.

### Uruguay

The notes have not been registered with the Central Bank of Uruguay and will not be offered or sold in Uruguay through public offerings.

### Venezuela

The notes may not be offered to the public in Venezuela and may not be sold or offered in Venezuela in any manner that may be construed as a public offering, as determined under Venezuelan securities laws. The notes may be sold by means of a private offer through sales that do not constitute a public offering, as determined under Venezuelan securities laws.

In connection with the issue of any tranche of notes, Goldman Sachs International (or persons acting on its behalf) may over-allot notes (provided that, in the case of any tranche of notes to be listed on the Official List of the London Stock Exchange, the aggregate principal amount of notes allotted does not exceed 105 per cent of the aggregate principal amount of the relevant tranche) or effect transactions with a view to supporting the market price of the notes at a level higher than that which might otherwise prevail. However, there is no assurance that Goldman Sachs International (or persons acting on its behalf) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate public disclosure of the final terms of the offer of the relevant tranche of notes is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant tranche of notes.

Goldman Sachs International is an affiliate of The Goldman Sachs Group, Inc.

We may appoint agents, other than or in addition to Goldman Sachs International, with respect to the notes. Any agents will be named in the applicable final terms and those agents will enter into distribution agreements with substantially the same terms as the distribution agreement referred to above or such other agreements as we and such other agents may agree. The other agents may be affiliates or customers of The Goldman Sachs Group, Inc. and may engage in transactions with and perform services for The Goldman Sachs Group, Inc. in the ordinary course of business. Goldman Sachs International may resell notes to or through another of our affiliates, as selling agent.

## Market-Making Resales by Affiliates

This Base Prospectus may be used by Goldman Sachs International in connection with offers and sales of the notes in market-making transactions. In a market-making transaction, Goldman Sachs

International may resell a note it acquires from other holders, after the original offering and sale of the note. Resales of this kind may occur in the open market or may be privately negotiated, at prevailing market prices at the time of resale or at related or negotiated prices. In these transactions, Goldman Sachs International may act as principal or agent, including as agent for the counterparty in a transaction in which Goldman Sachs International acts as principal, or as agent for both counterparties in a transaction in which Goldman Sachs International does not act as principal. Goldman Sachs International may receive compensation in the form of discounts and commissions, including from both counterparties in some cases. Other affiliates of The Goldman Sachs Group, Inc. may also engage in transactions of this kind and may use this Base Prospectus for this purpose.

The aggregate initial offering price specified on the cover of this Base Prospectus relates to the initial offering of the notes not yet issued as of the date of this Base Prospectus. This amount does not include the notes to be sold in market-making transactions. The latter include notes to be issued after the date of this Base Prospectus, as well as notes previously issued.

The Goldman Sachs Group, Inc. does not expect to receive any proceeds from market-making transactions. Goldman Sachs International does not expect that The Goldman Sachs Group, Inc. or any other affiliate that engages in these transactions will pay any proceeds from its market-making resales to The Goldman Sachs Group, Inc.

Information about the trade and settlement dates, as well as the purchase, for a market-making transaction will be provided to the purchaser in a separate confirmation of sale.

Unless The Goldman Sachs Group, Inc. or an agent informs you in your confirmation of sale that your note is being purchased in its original offering and sale, you may assume that you are purchasing your note in a market-making transaction.

## Matters Relating to Initial Offering and Market-Making Resales

Each issuance of notes will be a new issuance, and there will be no established trading market for any note prior to its original issue date. We may not list any particular issuance on a securities exchange or quotation system. We have been advised by Goldman Sachs International that it intends to make a market in the notes, and any underwriters to whom we sell notes for public offering may also make a market in those notes. However, neither Goldman Sachs International nor any underwriter that makes a market is obligated to do so, and any of them may stop doing so at any time without notice. No assurance can be given as to the liquidity or trading market for any of the notes.

### EMPLOYEE RETIREMENT INCOME SECURITY ACT

This section is only relevant to you if you are an insurance company or the fiduciary of a pension plan or an employee benefit plan (including a governmental plan, an IRA or a Keogh plan) proposing to invest in the notes.

The U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA") and the Code, prohibit certain transactions ("prohibited transactions") involving the assets of an employee benefit plan that is subject to the fiduciary responsibility provisions of ERISA or Section 4975 of the Code (including individual retirement accounts, Keogh plans, and other plans described in Section 4975(e)(1) of the Code) (each, a "Plan") and certain persons who are "parties in interest" (within the meaning of ERISA) or "disqualified persons" (within the meaning of the Code) with respect to the Plan; governmental plans may be subject to similar prohibitions unless an exemption applies to the transaction. The assets of a Plan may include assets held in the general account of an insurance company that are deemed to be "plan assets" under ERISA or assets of certain investment vehicles in which the Plan invests.

The Goldman Sachs Group, Inc. and certain of its affiliates each may be considered a "party in interest" or a "disqualified person" with respect to many Plans, and, accordingly, prohibited transactions may arise if the notes are acquired or held by or on behalf of a Plan unless those notes are acquired and held pursuant to an available exemption. In general, available exemptions include: transactions effected on behalf of that Plan by a "qualified professional asset manager" (prohibited transaction exemption 84-14) or an "in-house asset manager" (prohibited transaction exemption 96-23), transactions involving insurance company general accounts (prohibited transaction exemption 95-60), transactions involving insurance company pooled separate accounts (prohibited transaction exemption 90-1), transactions involving bank collective investment funds (prohibited transaction exemption 91-38), and transactions with service providers under Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code where the Plan receives no less and pays no more than "adequate consideration" (within the meaning of Section 408(b)(17) of ERISA and Section 4975(f)(10) of the Code). The person making the decision on behalf of a Plan or a governmental plan shall be deemed, on behalf of itself and the plan, by purchasing and holding the notes, or exercising any rights related thereto, to represent that (a) the plan will receive no less and pay no more than "adequate consideration" (within the meaning of Section 408(b)(17) of ERISA and Section 4975(f)(10) of the Code) in connection with the purchase and holding of the notes, (b) none of the purchase, holding or disposition of the notes or the exercise of any rights related to the notes will result in a non-exempt prohibited transaction under ERISA or the Code (or, with respect to a governmental plan, under any similar applicable law or regulation), and (c) neither The Goldman Sachs Group. Inc. nor any of its affiliates is a "fiduciary" (within the meaning of Section 3(21) of ERISA or, with respect to a governmental plan, under any similar applicable law or regulation) with respect to the purchaser or holder in connection with such person's acquisition, disposition or holding of the notes, or as a result of any exercise by The Goldman Sachs Group, Inc. or any of its affiliates of any rights in connection with the notes, and neither The Goldman Sachs Group, Inc. nor any of its affiliates has provided investment advice in connection with such person's acquisition, disposition or holding of the notes.

If you are an insurance company or the fiduciary of a pension plan or an employee benefit plan (including a governmental plan, an IRA or a Keogh plan), and propose to invest in the notes, you should consult your legal counsel.

### LISTING AND GENERAL INFORMATION

If indicated in the applicable final terms, application will be made to list the particular issue of notes issued under this Base Prospectus on the Official List and to admit them to trading on the Main Market of the London Stock Exchange.

Pursuant to the UK Prospectus Regulation, this Base Prospectus and all supplements to the Base Prospectus, all documents incorporated by reference herein and filed with the FCA, and any final terms will be made available by the London Stock Exchange on its website at <u>www.londonstockexchange.com</u>.

As long as the notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a paying agent and /or a transfer agent in any particular place, we will maintain a paying agent and/or transfer agent having its specified office in the place required by such competent authority, stock exchange and/or quotation system. We are under no obligation to maintain the listing of any notes that are listed.

Issues of notes denominated in Swiss francs will be effected in compliance with the relevant regulations of the Swiss National Bank.

The issuance of the notes has been authorized by resolutions adopted by the Board of Directors of GS Finance Corp. on December 4, 2007. The issuance of the guarantee of The Goldman Sachs Group, Inc. has been authorized by resolutions adopted by the Board of Directors of The Goldman Sachs Group, Inc. on October 28, 2011 and a Determination of the Treasurer, dated February 2, 2018.

Effective May 24, 2021, The Goldman Sachs Group, Inc. appointed Kimberley D. Harris as an independent member of its Board of Directors. Ms. Harris was also appointed to each of the Goldman Sachs Group's Corporate Governance and Nominating, Compensation and Public Responsibilities Committees.

The board of directors of The Goldman Sachs Group, Inc. has a written related person transactions policy regarding the review and approval of transactions between The Goldman Sachs Group, Inc. and "related persons" (directors, executive officers, immediate family members of a director or executive officer, or known 5% shareholders). Under the policy, transactions that exceed \$120,000 in which a related person may have or may be deemed to have a direct or indirect material interest are submitted to The Goldman Sachs Group, Inc.'s Governance Committee Chair, its Audit Committee Chair or its full Governance Committee for approval, as applicable. Certain transactions, including employment relationships, ordinary course brokerage, investment and other services, payment of certain regulatory filing fees and certain other ordinary course non-preferential transactions, are considered preapproved transactions, and thus do not require specific approval under the policy (although these transactions must be reported to The Goldman Sachs Group, Inc.'s Governance Committee and may still be submitted for approval if deemed appropriate).

In determining whether to approve a related person transaction, the following factors, among others, are considered: whether the transaction is fair and reasonable to The Goldman Sachs Group, Inc. and on substantially the same terms as would apply to comparable third-parties; the business reasons for the transaction; whether the transaction would impair the independence of an independent director; whether the transaction presents a conflict of interest, taking into account the size of the transaction, the financial position of the independent director or executive officer, the nature of the independent director's or executive officer's interest in the transaction and the ongoing nature of the transaction; any disclosure or reputational issues; and whether the transaction is material, taking into account the significance of the transaction to The Goldman Sachs Group, Inc.'s investors.

Potential conflicts of interests: Transactions and relationships that may involve directors or executive officers or entities affiliated with them are described in the section "Certain Relationships and Related Transactions" on pages 91-94 of The Goldman Sachs Group Inc.'s 2021 Proxy Statement, which is incorporated by reference herein.

The Goldman Sachs Group, Inc. is registered in the State of Delaware in the United States. The Goldman Sachs Group, Inc. is organized and exists under the Delaware General Corporation Law. The

Goldman Sachs Group, Inc. filed its original certificate of incorporation with the Secretary of State of the State of Delaware on July 21, 1998. Pursuant to the laws of the State of Delaware, the duration of the company is unlimited. Its registration number is 2923466. Pursuant to the paragraph headed "Third" of the second clause its Restated Certificate of Incorporation, the purpose of the company is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law.

GS Finance Corp. is registered in the State of Delaware in the United States. GS Finance Corp. is organized and exists under the Delaware General Corporation Law. GS Finance Corp. filed its original certificate of incorporation with the Secretary of State of the State of Delaware on August 17, 2007. Pursuant to the laws of the State of Delaware, the duration of our company is unlimited. Our registration number is 3686610. Pursuant to the paragraph headed "Third" of the second clause our Restated Certificate of Incorporation, the purpose of our company is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law.

As of the date of this Base Prospectus, the board of directors of GS Finance Corp. consists of four members, Daniel C. Fishman, Laurence M. Kleinman, Monique Y. Rollins and James J. White, Jr. The directors will serve until their successors are duly elected and qualified. GS Finance Corp. will have at least two officers. As of the date of this Base Prospectus, the names and titles of the current officers of GS Finance Corp. are set forth below:

Monique Y. Rollins	President
James J. White, Jr.	Vice President and Assistant Treasurer
Daniel C. Fishman	Treasurer
Matthew E. Tropp	General Counsel and Secretary
Terence M. Donnelly	Controller
Julie A. Hausen	Assistant Secretary
Laurence M. Kleinman	Assistant Secretary
Getty Chin	Assistant Treasurer
Robert Ennis	Assistant Treasurer
Kirsten A. Imohiosen	Assistant Treasurer

All of the officers of GS Finance Corp. are also officers or employees of The Goldman Sachs Group, Inc. or its affiliates. The directors and officers of GS Finance Corp. do not hold any relevant positions outside GS Finance Corp. and/or the Goldman Sachs Group that are significant with respect to GS Finance Corp., and there are no potential conflicts of interest of the members of the board of directors between their duties to GS Finance Corp. and their private interests and/or other duties.

The business address of the directors of GS Finance Corp. and The Goldman Sachs Group, Inc. is 200 West Street, New York, New York 10282, United States, telephone +1 (212) 902-1000.

GS Finance Corp. has not entered into any material contract outside the ordinary course of business which could result in its being under an obligation or entitlement which is, or may be, material to the ability of GS Finance Corp., the Goldman Sachs Group Inc., or any member of the Group to meet its obligations in respect of the notes. There are no recent events particular to GS Finance Corp. which are to a material extent relevant to the evaluation of GS Finance Corp.'s solvency.

### **Documents Available for Review**

As long as any notes remain outstanding, copies of the Certificate of Incorporation and By-laws of GS Finance Corp., the Restated Certificate of Incorporation and Amended and Restated By-laws of The Goldman Sachs Group, Inc. and most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K of The Goldman Sachs Group, Inc. may be obtained during normal business hours on any weekday (*i.e.*, except Saturdays, Sundays and public holidays) at the specified office of, or upon written request to, the fiscal agent. In addition, a copy of the fiscal agency agreement will be available for inspection at those offices during those hours.

Copies of these documents are, or will be, available on the website of The Goldman Sachs Group, Inc., <u>https://www.goldmansachs.com/investor-relations/index.html or, where indicated, on the website of</u> the London Stock Exchange, <u>www.londonstockexchange.com</u>. No information on such websites forms part of this Base Prospectus, except where that information has been incorporated by reference into this Base Prospectus. Copies of this Base Prospectus and all documents that are incorporated by reference herein shall be available in electronic form for at least ten years following the publication of this Base Prospectus, at the websites indicated in "Documents Incorporated by Reference" above.

#### Independent Registered Public Accounting Firm

The Goldman Sachs Group, Inc.'s consolidated statements of financial condition as of December 31, 2019 and December 31, 2020, the related consolidated statements of earnings, cash flows and changes in shareholders' equity for the fiscal years ended December 31, 2018, December 31, 2019 and December 31, 2020, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2020 (which is included in management's report on internal control over financial reporting) are incorporated herein by reference to The Goldman Sachs Group, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and have been audited by PricewaterhouseCoopers LLP, as stated in their report incorporated by reference herein. No other information in this Base Prospectus has been audited by PricewaterhouseCoopers LLP.

PricewaterhouseCoopers LLP, is an independent registered public accounting firm under the rules of the Public Company Accounting Oversight Board, of 300 Madison Avenue, New York, New York 10017, U.S.A., and a member of the American Institute of Certified Public Accountants.

#### Yield

In relation to any tranche of fixed rate notes, an indication of yield in respect of such notes will be specified in the applicable final terms. The yield is calculated at the issue date of the notes on the basis of the relevant issue price. The yield indicated will be calculated as the yield to maturity as at the issue date of the notes and will not be an indication of future yield.

#### Material Adverse or Significant Changes and Legal Proceedings

There has been no significant change in the financial position or financial performance of GS Finance Corp. since June 30, 2021. There has been no material adverse change in the prospects of GS Finance Corp. since December 31, 2020.

There has been no significant change in the financial position or financial performance of The Goldman Sachs Group, Inc. and its consolidated subsidiaries since June 30, 2021. There has been no material adverse change in the prospects of The Goldman Sachs Group, Inc. since December 31, 2020.

Save as disclosed in (1) Part II, Item 8: Financial Statements and Supplementary Data – Note 27: Legal Proceedings on pages 202 – 209 of The Goldman Sachs Group Inc.'s 2020 Form 10-K, or (2) Part I, Item 1: Financial Statements — Note 27. Legal Proceedings on pages 86 to 94 of The Goldman Sachs Group Inc.'s 2021 Second Quarter Form 10-Q, there have been no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which GS Finance Corp. or The Goldman Sachs Group, Inc., is aware) during the twelve months before the approval date of this Base Prospectus which may have, or have had in the recent past, significant effects on GS Finance Corp. or The Goldman Sachs Group, Inc.'s and its consolidated subsidiaries' financial position or profitability, In the foregoing statements required by the Prospectus Regulation, references to the "prospects", "financial performance" and "financial position" of GS Finance Corp. and The Goldman Sachs Group, Inc., as the case may be, are specifically to the ability of each of GS Finance Corp. and The Goldman Sachs Group, Inc. to meet its full payment obligations under the notes (in the case of GS Finance Corp.) or the guarantees (in the case of The Goldman Sachs Group, Inc.) in a timely manner. Material information about The Goldman Sachs Group, Inc.'s financial condition and prospects is included in the periodic reports on Forms 10-K, 10-Q and 8-K which are incorporated by reference into this Base Prospectus.

#### TAXATION

Investors should be aware that the tax legislation of the country in which the investor is resident and of The Goldman Sachs Group, Inc.'s country of incorporation may have an impact on the income received from the notes.

The level and basis of taxation on the notes and on the holders and any reliefs from such taxation depend on the holder's individual circumstances and could change at any time and may have an impact on the return received by the holder.

The tax and regulatory characterization of the notes may change over the life of the notes. Investors will therefore need to consult their own tax advisers to determine the specific tax consequences of the purchase, ownership, transfer and redemption, exercise or expiry or enforcement of the notes.

#### UNITED STATES TAXATION

The following is a summary of the principal United States federal income and estate tax consequences to a United States alien holder. You are a United States alien holder if you are the beneficial owner of a note and are, for United States federal income tax purposes:

- a nonresident alien individual;
- a foreign corporation;
- a foreign partnership; or
- an estate or trust that in either case is not subject to United States federal income tax on a net income basis on income or gain for a note

that does not hold the note in connection with the conduct of a trade or business within the United States.

This summary deals only with notes that are properly treated as debt for U.S. federal income tax purposes. The United States federal income tax consequences of owning notes that may not be so treated will be discussed in the applicable final terms.

Prospective purchasers of notes should be advised that any bank which purchases a note will be deemed to represent that it is not purchasing the note in the ordinary course of its lending business and that it is buying the note either (1) for investment purposes only or (2) for resale to a third party that either is not a bank or is holding the note for investment purposes only.

Please consult your own tax advisor concerning the consequences of owning these notes in your particular circumstances under the Internal Revenue Code and the laws of any other taxing jurisdiction.

Under United States federal income and estate tax law, and subject to the discussions below under "— Foreign Account Tax Compliance Withholding", "— Dividend Equivalent Payments" and "—Backup Withholding and Information Reporting", if you are a United States alien holder of a note:

- (1) we and other U.S. payors generally will not be required to deduct United States federal withholding tax from payments of principal and premium (if any) and interest, including original issue discount, to you if, in the case of payments of interest:
  - (a) you do not actually or constructively own 10% or more of the total combined voting power of all classes of our stock entitled to vote;

- (b) you are not a controlled foreign corporation that is related to us through stock ownership; and
- (c) the U.S. payor does not have actual knowledge or reason to know that you are a United States person and:
  - (A) you have furnished to the U.S. payor an Internal Revenue Service Form W-8BEN, Form W-8BEN-E or an acceptable substitute form upon which you certify, under penalties of perjury, that you are not a United States person;
  - (B) in the case of payments made outside the United States to you at an offshore account (generally, an account maintained by you at a bank or other financial institution at any location outside the United States), you have furnished to the U.S. payor documentation that establishes your identity and your status as the beneficial owner of the payment for United States federal income tax purposes and as a person who is not a United States person;
  - (C) the U.S. payor has received a withholding certificate (furnished on an appropriate Internal Revenue Service Form W-8 or an acceptable substitute form) from a person claiming to be:
    - a withholding foreign partnership (generally a foreign partnership that has entered into an agreement with the Internal Revenue Service to assume primary withholding responsibility with respect to distributions and guaranteed payments it makes to its partners);
    - (y) a qualified intermediary (generally a non-United States financial institution or clearing organization or a non-United States branch or office of a United States financial institution or clearing organization that is a party to a withholding agreement with the Internal Revenue Service); or
    - (z) a United States branch of a non-United States bank or of a non-United States insurance company;

and the withholding foreign partnership, qualified intermediary or United States branch has received documentation upon which it may rely to treat the payment as made to a person who is not a United States person that is, for United States federal income tax purposes, the beneficial owner of the payments on the notes in accordance with United States Treasury regulations (or, in the case of a qualified intermediary, in accordance with its agreement with the United States Internal Revenue Service);

- (D) the U.S. payor receives a statement from a securities clearing organization, bank or other financial institution that holds customers' securities in the ordinary course of its trade or business:
  - (x) certifying to the U.S. payor under penalties of perjury that an Internal Revenue Service Form W-8BEN, Form W-8BEN-E or an acceptable substitute form has been received from you by it or by a similar financial institution between it and you; and
  - (y) to which is attached a copy of the Internal Revenue Service Form W-8BEN, Form W-8BEN-E or acceptable substitute form; or

- (E) the U.S. payor otherwise possesses documentation upon which it may rely to treat the payment as made to a person who is not a United States person that is, for United States federal income tax purposes, the beneficial owner of the payments on the notes in accordance with United States Treasury regulations;
- (2) no deduction for any United States federal withholding tax will be made from any gain that you realize on the sale or exchange of your note; and
- (3) a note held by an individual who at death is not a citizen or resident of the United States will not be includible in the individual's gross estate for purposes of the United States federal estate tax if:
  - the decedent did not actually or constructively own 10% or more of the total combined voting power of all classes of our stock entitled to vote at the time of death; and
  - (b) the income on the note would not have been effectively connected with a United States trade or business of the decedent at the time of death.

#### Foreign Account Tax Compliance Withholding (FATCA)

A U.S. law enacted in 2010 (commonly known as "FATCA") could impose a withholding tax of 30% on interest income (including original issue discount) and other periodic payments on notes paid to you or any non-U.S. person or entity that receives such income (a "non-U.S. payee") on your behalf, unless you and each such non-U.S. payee in the payment chain comply with the applicable information reporting, account identification, withholding, certification and other FATCA-related requirements. In the case of a payee that is a non-U.S. financial institution (for example, a clearing system, custodian, nominee or broker), withholding generally will not be imposed if the financial institution complies with the requirements imposed by FATCA to collect and report (to the U.S. or another relevant taxing authority) substantial information regarding such institution's U.S. account holders (which would include some account holders that are non-U.S. entities but have U.S. owners). Other payees, including individuals, may be required to provide proof of tax residence or waivers of confidentiality laws and/or, in the case of non-U.S. entities, certification or information relating to their U.S. ownership.

Withholding may be imposed at any point in a chain of payments if the payee is not compliant. A chain may work as follows, for example: The payment is transferred through a paying agent to a clearing system, the clearing system makes a payment to each of the clearing system's participants, and finally the clearing system participant makes a payment to a non-U.S. bank or broker through which you hold the notes, who credits the payment to your account. Accordingly, if you receive payments through a chain that includes one or more non-U.S. payees, such as a non-U.S. bank or broker, the payment could be subject to withholding if, for example, your non-U.S. bank or broker through which you hold the notes fails to comply with the FATCA requirements and is subject to withholding. This would be the case even if you would not otherwise have been directly subject to withholding.

A number of countries have entered into, and other countries are expected to enter into, agreements with the U.S. to facilitate the type of information reporting required under FATCA. While the existence of such agreements will not eliminate the risk that notes will be subject to the withholding described above, these agreements are expected to reduce the risk of the withholding for investors in (or investors that indirectly hold notes through financial institutions in) those countries.

We will not pay any additional amounts in respect of this withholding tax, so if this withholding applies, you will receive less than the amount that you would have otherwise received.

Depending on your circumstances, you may be entitled to a refund or credit in respect of some or all of this withholding. However, even if you are entitled to have any such withholding refunded, the required procedures could be cumbersome and significantly delay your receipt of any withheld amounts. You should

consult your own tax advisors regarding FATCA. You should also consult your bank or broker through which you would hold the notes about the likelihood that payments to it (for credit to you) may become subject to withholding in the payment chain.

#### **Dividend Equivalent Payments**

Section 871(m) of the Code provides for a 30% withholding tax (subject to reduction under an applicable treaty) on "dividend equivalents" that are paid to foreign investors with respect to certain financial instruments that reference the performance of a U.S. equity. Under these rules, if a note that is issued after January 1, 2017 provides for "delta-one" exposure to the performance of shares of a U.S. corporation, we will be obligated to impose U.S. withholding tax in respect of the actual dividends that are paid on the shares of the corporation (or corporations) that are referenced by the note even if we do not actually transmit such amounts to you. This tax will also apply if a note provides for delta-one exposure to an index or basket that includes shares of a U.S. corporation, unless the index or basket constitutes a "qualified index". If the basket or index is not a "qualified index", the tax will only apply to the dividends on shares of the U.S. corporations that are included in the index. A note will generally be treated as providing for a "delta-one" position if it provides for 100% participation in all of the appreciation and depreciation in the performance of the shares that are referenced by the note.

Notes issued pursuant to this Base Prospectus will not be subject to withholding under the rules described above. However, a holder may be subject to Section 871(m) even if it holds a note that is not a "delta-one" note under the rules described above if (a) the holder's position under the note would be "delta-one" when combined with other related positions that are held by the holder or (b) if a principal purpose for the holder's investment in the note is to avoid the application of Section 871(m), in which case a special Section 871(m) anti-abuse rule could apply to the holder's investment in the notes. In such a case, a United States alien holder may be liable for Section 871(m) tax in respect of its notes even when no withholding is required in respect of the notes.

Furthermore, notes that are issued on or after January 1, 2023 may be subject to Section 871(m) even if they are not a "delta-one" note under the rules described above. It is possible that the IRS could assert that a note that is issued before such date could be deemed to be reissued for tax purposes after January 1, 2023 upon a rebalancing or adjustment of the asset, position, index or basket that is referenced by the note. In such a case, a note that is originally issued before January 1, 2023 and is not "delta-one" (and is thus originally not subject to Section 871(m)) could be subject to Section 871(m) after the deemed reissuance.

The application of Section 871(m) to the notes is complex, and there may be uncertainties regarding the application of Section 871(m) to the notes. If you are a United States alien holder, you should consult your tax advisor about the application of Section 871(m) to your notes.

#### **Backup Withholding and Information Reporting**

In general, we and other payors are required to report payments of interest on your notes on IRS Form 1042-S. Payments of principal, premium or interest, including OID, made by us and other payors to you would otherwise not be subject to information reporting and backup withholding, provided that the certification requirements described in clause (1)(c) above are satisfied or you otherwise establish an exemption.

In addition, payment of the proceeds from the sale of notes effected at a United States office of a broker will not be subject to backup withholding and information reporting if (i) the payor or broker does not have actual knowledge or reason to know that you are a United States person and (ii) you have furnished to the payor or broker an appropriate IRS Form W-8, an acceptable substitute form or other documentation upon which it may rely to treat the payment as made to a non-United States person.

In general, payment of the proceeds from the sale of notes effected at a foreign office of a broker will not be subject to information reporting or backup withholding. However, a sale effected at a foreign

office of a broker could be subject to information reporting in the same manner as a sale within the United States (and in certain cases may be subject to backup withholding as well) if (i) the broker has certain connections to the United States, (ii) the proceeds or confirmation are sent to the United States or (iii) the sale has certain other specified connections with the United States. In addition, certain foreign brokers may be required to report the amount of gross proceeds from the sale or other disposition of notes under FATCA if you are, or are presumed to be, a United States person.

You generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed your income tax liability by filing a refund claim with the IRS.

#### THE PROPOSED FINANCIAL TRANSACTIONS TAX ("FTT")

In 2013, the European Commission published a proposal for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia. In December 2015 Estonia withdrew from the group of states willing to introduce the FTT (the "**Participating Member States**").

The FTT proposal remains subject to negotiation between the (still) Participating Member States; the scope of any such tax and its adoption are uncertain. Additional EU member states may decide to participate and / or certain of the Participating Member States may decide to withdraw. Following the meeting of the Council of the EU of 14 June 2019, the FTT currently being considered by the Participating Member States would be levied on the acquisition of shares or similar instruments of listed companies which have their head office in a member state of the EU (and market capitalization in excess of €1 billion on 1 December of the preceding year), rather than on any type of financial instrument.

On 21 July 2020 the European Council adopted conclusions on the recovery effort and multiannual financial framework for 2021-2027 ("**MFF**"), in which it stated that the EU will, in the course of the MFF, work towards the introduction of new own resources, which may include an FTT.

If the proposed Directive or any similar tax was adopted and depending on the final terms and scope of the FTT, transactions on the notes could be subject to higher costs, and the liquidity of the market for the notes may be diminished. Prospective holders of the notes are advised to seek their own professional advice in relation to the FTT.

#### FORM OF FINAL TERMS (Series B Notes)

PROHIBITION OF SALES TO EEA RETAIL INVESTORS - The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (the "EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MIFID II"); or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MIFID II;. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PROHIBITION OF SALES TO UK RETAIL INVESTORS – The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom (the "UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("EUWA"); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 ("FSMA") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA. Consequently no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

Final Terms No. [•] to the Base Prospectus dated September 24, 2021[, as supplemented]



**GS** Finance Corp.

Euro Medium-Term Notes, Series B

Legal Entity Identifier (LEI): 549300FR80KBVO6DRL61

[Title of [[Fixed Rate [(Zero Coupon)] [(Discount)]] [/] [Floating Rate] [/] [Indexed (Range Accrual)] [Indexed (Steepener/Flattener)] [Indexed (Asian [Absolute] Performance)] [Indexed (Digital)] [Indexed (Outperformance)] [Indexed (Participation)] notes]

guaranteed by

### The Goldman Sachs Group, Inc.

Legal Entity Identifier (LEI): 784F5XWPLTWKTBV3E584

Contractual Terms:

[Terms used herein shall be deemed to be defined as such for the purposes of the General Note Conditions set forth in the base prospectus dated September 24, 2021[, as supplemented by Prospectus Supplement No. [•] [...]] (the "Base Prospectus"), which is a base prospectus for the purposes of the Regulation (EU) 2017/1129 as it forms part of domestic law in the United Kingdom by virtue of the European Union (Withdrawal) Act 2018 (the "UK Prospectus Regulation"). This document constitutes the Final Terms of the Notes described herein for the purposes of the UK Prospectus Regulation and must be read in conjunction with such Base Prospectus. Full information on the Issuer, the Guarantor and the offer of the Notes is only available on the basis of the combination of these Final Terms and the Base Prospectus.

The Base Prospectus is available for viewing at <u>www.londonstockexchange.com</u> and during normal business hours at the registered office of the Issuer, and copies may be obtained from the specified office of the Paying Agent. [These Final Terms are available for viewing at [www.londonstockexchange.com] [*Insert the following additional language into the initial set of Final Terms for straddle offers for which two sets of Final Terms will be published*: **The Offer Period for the Notes extends beyond the validity of the Base Prospectus, which will expire on September 25, 2022 (the "Expiry Date")**. On or prior to this date, a successor base prospectus in respect of the Series B euro medium-term notes program (the "Successor Base Prospectus") and successor Final Terms for the Notes (the "Successor Final Terms") will be published. From and including the date on which the Successor Base Prospectus is approved by the Financial Conduct Authority, (i) the Successor Final Terms shall constitute Final Terms for the Notes for the purposes of Article 8(4) of the UK Prospectus Regulation and (ii) full information on the Issuer and the offer of the Notes shall only be available on the basis of the combination of the Successor Final Terms and the Successor Base Prospectus. The Successor Base Prospectus will be available for viewing at <u>www.londonstockexchange.com</u> and during normal business hours at the registered office of the Issuer, and copies may be obtained from the specified office of the Paying Agent. The Successor Final Terms will be published at [www.londonstockexchange.com]

[Insert the following additional language into the initial set of Final Terms for straddle offers for which a single set of Final Terms will be published: The Offer Period for the Notes extends beyond the validity of the Base Prospectus which will expire on September 25, 2022 (the "Expiry Date"). On or prior to this date, a successor base prospectus in respect of the Series B euro medium-term notes program (the "Successor Base Prospectus") will be published. From and including the date on which the Successor Base Prospectus is approved by the Financial Conduct Authority, (i) these Final Terms must be read in conjunction with the Successor Base Prospectus and (ii) full information on the Issuer and the offer of the Notes shall only be available on the basis of the combination of these Final Terms and the Successor Base Prospectus. The Successor Base Prospectus will be available for viewing at www.londonstockexchange.com and during normal business hours at the registered office of the Issuer, and copies may be obtained from the specified office of the Paying Agent.]

[Insert the following additional language into a successor set of Final Terms for straddle offers in which two sets of Final Terms will be published: The offer of the notes to which these Final Terms relate commenced on [•], and these Final Terms and the Base Prospectus are the Successor Final Terms and the Successor Base Prospectus, respectively, referred to in the Final Terms dated [•]].

[The issuance of the Notes has been authorized by resolutions adopted by the Board of Directors of GS Finance Corp. on December 4, 2007. The issuance of the guarantee of The Goldman Sachs Group, Inc. has been authorized by resolutions adopted by the Board of Directors of The Goldman Sachs Group, Inc. on October 28, 2011 and a Determination of the Treasurer, dated February 2, 2018.]

[Specify whether each of the items below is applicable or not applicable. Italics denote guidance for completing final terms.]

Tranche Number	[F-●] [If fungible with an existing tranche, include the date on which the Notes become fungible]
Face Amount (Aggregate Notional Amount)	[•] [If fungible with an existing tranche, specify the face amount of this tranche and the entire face amount of all fungible tranches]
Denomination	[•]
Minimum Investment	[●] [Not applicable]

Type of Note	[[Fixed Rate [(Zero Coupon)] [(Discount)]] [/] [Floating Rate] [/] [Indexed (Range Accrual)] [Indexed (Steepener/Flattener)] [Indexed (Asian [Absolute] Performance)] [Indexed (Digital)] [Indexed (Outperformance)] [Indexed (Participation)] [UDI-Linked] Series B note
Specified Currency	[•]
Trade Date	[•]
Original Issue Date	<ul> <li>[•]</li> <li>[If fungible with an existing tranche, specify the original issue dates of all fungible tranches]</li> </ul>
ISIN Code	[•]
Common Code	[•]
[Financial Short Name ("FISN")	[•]]
[Classification of Financial Instruments ("CFI") Code	[•]]
[WKN	[•]]
[Valoren Number	[•]]
Stated Maturity Date	[•]
Original Issue Price	[•] per cent. of the Face Amount [plus accrued interest from [ <i>insert date</i> ] ].
Net Proceeds to Issuer	[Up to] [•] per cent. of the Face Amount
Original Issue Discount	[Not Applicable] [Applicable] [ <i>If Not Applicable, delete the remainder of this row.</i> ] [ <i>If Discount Note:</i> <b>OID</b> : [●]%] <b>Accretion Date</b> : [●] each year <b>Accretion Rate</b> : [●]% per annum
Amount Payable at Maturity (Final Redemption Amount)	<ul> <li>[<i>If Indexed (Participation) notes and UDI-Linked Notes are Not Applicable:</i></li> <li>[[100]%[insert number greater than 100]% of the Face Amount outstanding on the Stated Maturity Date]]</li> <li>Indexed (Participation) Notes: [Applicable][Not Applicable]</li> <li>[<i>If Indexed (Participation) notes is Applicable. Select the applicable provisions for each and delete the remainder. For all other notes, delete the remainder of this row.</i>]</li> <li>See "General Note Conditions — Redemption and Repayment — Redemption at Maturity — Indexed (Participation) Notes" in the Base Prospectus Index: [•]</li> <li>Index Sponsor: [•]</li> <li>Index Currency: [•]</li> <li>Index Valuation Time: [•]</li> <li>Capped Participation: [Applicable][Not Applicable]</li> <li>FX Participation: [Applicable][Not Applicable]</li> <li>FX Participation: [Applicable][Not Applicable]</li> <li>FX Rarticipation: [Applicable][Not Applicable]</li> <li>FX Rarticipation: [Applicable][Not Applicable]</li> <li>(i) FXR: [Non-Inverse Return][Inverse Return]</li> <li>(ii) FXR Cap: [[•] / The Specified Rate]</li> <li>(iii) FX (Initial): [[•] / The Specified Rate]</li> <li>(iv) FXR Floor: [•] / Expected to be [•] [but shall not be [more than [•]] [and] [less than [•]] / Not Applicable]</li> <li>(v) Reference Currency: [insert currency]</li> <li>(vi) Base Currency: [insert currency]</li> <li>(vi) Base Currency: [insert currency]</li> <li>(vii) Specified Rate: [Official fixing rate / Official mid closing rate / Spot rate / Mid rate / Fixing rate].</li> <li>(viii) Fixing Price Sponsor: [•]</li> <li>(x) Valuation Time: [insert time]</li> <li>(x) FX Price Source: [•]</li> </ul>

Maturity Lock-In: [Applicable][Not Applicable]

[If Maturity Lock-In is "Applicable",

**Lock-In Amount**: [100]%[*insert number greater than 100*]% of the Face Amount outstanding on the Stated Maturity Date].

Nominal Amount (N): [•]

**Participation:** [[If Reference Price (Final) is [*greater*]/[*less*] *than* [*or equal to*] [Reference Price (Initial)]/[•], [•]; otherwise,] [•] / Expected to be [•] [but shall not be [more than [•]] [and] [less than [•]]]].

**Cap:** [[•] / Expected to be [•] [but shall not be [more than [•]] [and] [less than [•]]] / Not Applicable].

**Floor:** [[If Reference Price (Final) is [*greater*]/[*less*] *than* [*or equal to*] [Reference Price (Initial)]/[•], [•]; otherwise,] [•] / Expected to be [•] [but shall not be [more than [•]] [and] [less than [•]]]].

Strike: [•]

**Reference Price (Initial)**: [[•] / Initial Reference Price / Initial Average Price/ Initial Highest Price / Initial Lowest Price]].

Valuation Date: [[•]/Not Applicable].

Initial Valuation Date: [[•]/Not Applicable].

**Averaging**: [Applicable/Not Applicable]. [*If Not Applicable, delete the following sub-paragraphs*]

- (i) **Averaging Dates:** [[•] / Not Applicable].
- (ii) Initial Averaging Dates: [[•] / Not Applicable].
- (iii) Last Averaging Date: [[•] / Not Applicable].
- (iv) Last Initial Averaging Date: [[•] / Not Applicable].
- (v) Averaging Postponement: [Postponement][Modified Postponement]

Initial Observation Period: [Applicable/Not Applicable] [If Initial Observation Period is "Applicable",

Initial Observation Dates: [insert dates].

Final Observation Period: [Applicable/Not Applicable]

[If Final Observation Period is "Applicable",

Observation Level: [Lowest][Highest].

Final Observation Dates: [•]

Maximum Days of Postponement: [[8][•][Business Days]]

[Insert following provisions where note is linked to inflation or consumer price index]

- (i) Name of Inflation Index / Indices: [Name of Inflation Index / Indices (Bloomberg Code(s): [●])].
- (ii) Inflation Index Sponsor: [•].
- (iii) Initial Inflation Index Level: [Applicable / Not Applicable].
- (iv) Observation Date(s): [Five Business Days prior to any payment date as specified in Inflation Linked Condition 7 (Definitions) / Other (specify other number of Business Days prior to any payment date)].
- (v) Initial Reference Month: [[•]/Not Applicable].
- (vi) **Final Reference Month**: [[•]/Not Applicable].
- (vii) Relevant Reference Month: [[•]/Not Applicable].

UDI-Linked Notes: [Applicable][Not Applicable]

[If UDI-Linked Notes is Applicable, select the applicable provisions for each and delete the remainder. For all other notes, delete the remainder of this row.] **Amount Payable at Maturity**: An amount in MXN equal to the product of (1) the UDI-Linked Notional Amount times (2) the UDI Index Level on the Observation Date times (3) [[100%][•]%] [insert following provision where "UDI-Linked Floor" is specified as "100% of the Face Amount"][; provided that, if such amount is less

than 100% the Face Amount, the Amount Payable at Maturity shall be an amount in MXN equal to 100% of the Face Amount]

**UDI-Linked Floor:** [Not Applicable][100% of the Face Amount]

Index: Unidades de Inversión (UDI) or any successor or replacement index; see page [•]

	<ul> <li>Index Sponsor(s): Banco de Mexico or any successor or replacement index sponsor</li> <li>Initial Index Level: [•]</li> <li>UDI-Linked Notional Amount: The Face Amount of your note divided by the Initial Index Level[, rounded to [•] decimal places,] being [•]</li> <li>Observation Date: The date [•] Business Days prior to the Stated Maturity Date</li> <li>UDI Index Level: The official value of the Index, a MXN equivalent unit of account indexed to inflation on a daily basis, as measured by the change in the Mexican National Consumer Price Index (Indice Nacional de Precios al Consumidor) pursuant to the Decree approved by the Congress of Mexico and published in the Official Daily of the Federation on April 1, 1995, as amended from time to time, for purposes of determining the inflation-adjusted value of MXN and published by the index sponsor on its website</li> <li>http://www.banxico.org.mx/ (or any successor or replacement website); provided, however, that, if for any reason the UDI Index Level is not determined and published by the Index Sponsor for the Observation Date [or an Interest Determination Date], or if UDI is replaced by another inflation-indexed unit of account that is reported, sanctioned, recognized, published, announced or adopted (or other similar action) by the relevant governmental authority and such event makes the inflation-indexed replacement unit of account impossible to obtain, the calculation agent will determine the UDI Index Level, or its replacement as the case may be, for the relevant date in its sole discretion acting in good faith and a commercially reasonable manner.</li> </ul>
Yield to Maturity	[Not Applicable] [Fixed Rate notes only: [•]%]
Interest Rate Note Provisions	[Not Applicable] [Applicable] [If Not Applicable, delete the remainder of this row. If applicable, select the applicable interest rate provisions for each Interest Payment Date and delete the remainder. Repeat as required.]          For [all][the] Interest Payment Date[s] Scheduled for [•] [and][through] [•]         Fixed Rate: [Applicable][Not applicable] [If Not applicable, delete the rest of this row:]         See "General Note Conditions — Interest Rates — Fixed Rate Notes" Interest Rate: •% per annum Interest Payment Dates: [specify] Day Count Fraction: 1/1 (ISDA)] [Actual/Actual (ISDA)] [Actual/Actual (ICMA)] [Actual/Actual (Bond)] [Actual/Actual (Euro)]
	[Actual/365 (Fixed)] [Actual/360 (ISDA)] [Actual/360 (ICMA)] [30/360 (ISDA)] Floating Rate: [Applicable][Not applicable] [ <i>If Not applicable, delete the rest of this row:</i> ] See "General Note Conditions — Interest Rates — Floating Rate Notes" Interest Rate: A rate per annum equal to the Base Rate [ <i>multiplied by</i> the Spread Multiplier][ <i>plus</i> the Spread][subject to the] [Minimum Rate][and][the Maximum Rate]] [Minimum Rate: •%] Base Rate: [•] [Spread: [•]% per annum][Not Applicable] [Spread Multiplier: [•]% per annum][Not Applicable] Compounding Interest: [Applicable][Not Applicable] Base Rate 0% Floor: [Applicable][Not Applicable] Underlyer Maturity: [Three month] [Six month] [1 year] [ <i>specify</i> ] Underlyer Screen Page: [•] [Applicable Reference Rate: [•]]

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row:] See "Gener Digital Note Lock-In: [A Interest Pro Worst-Of: [ Best-Of: [A Multiple Co	ral Note Conditions" pplicable][Not ap otection: [Applic [Applicable][Not ap pplicable][Not ap ponditions: [Applicable][Not ap	ons — Interest R oplicable] able][Not applica applicable]	able]			
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[•]	[insert date]	[insert Valuation Date] [insert Averaging Dates] [insert Final Observation Dates]	<pre>[[•]%]/ [A rate per annum equal to the Base Rate [plus the Spread][subject to the] [Minimum Rate][and][the Maximum Rate] [Minimum Rate: •%] [Maximum Rate: •%] Base Rate: [•] [Spread: [•]% per annum][Not Applicable] Underlyer Maturity: [Three month] [Six month] [1 year] [specify] Underlyer Currency: [EUR] [USD] [specify] Underlyer Screen Page: [•] Interest Determination Date:[specify]]</pre>			
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#### Index Information Table:

	Index Sponsor	Index	Reference	Destaura	Demier	
Index	Index Currency	Valuation Time	Price (Initial)	Performanc e Measure	Barrier Level	

[repeat ]	[•] [•] [ <i>repeat</i> ]	[•]	[[•] / [Initial Referenc e Price / Initial Average Price / Initial Highest Price / Initial Lowest Price] [repeat]	In respect of [each] Interest Period [Number [•]], [Equal to or] [Greater] [Less] Than; [repeat as required] [repeat]	In respect of [each] Interest Perioc [Numb r [•]], [•]% [repeat as require d] [repeat
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[insert date]	[[ <i>insert date</i> ] [•] Business Days prior to the Interest Payment Date	[•]%
[insert date] [repeat as required]	[[insert date] [•] Business Days prior to the Interest Payment Date [repeat as required]	[●]% [repeat as required]
[Actual/Actual (ICMA)]	ction: 1/1 (ISDA)] [Actual/Actual (Bond)] I/360 (ISDA)] [Actual/360 (IC	[Actual/Actual (ISDA)] [Actual/Actual (Euro)] CMA)] [30/360 (ISDA)]

#### Maximum Days of Postponement: [[8][•][Business Days]]

Non-Scheduled Early Repayment Amount	[Par Plus Accrued][Accreted Value][Fair Market Value][UDI-Linked Par Accrued][UDI-Linked Accreted Value][UDI-Linked Amount][100% of the F Amount] [insert following provision where Non-Scheduled Early Repay Amount is specified as either "UDI-Linked Par Plus Accrued", "UDI-Li Accreted Value" or "UDI-Linked Amount" and "UDI-Linked Floor" is specifie "100% of the Face Amount"][, subject to the UDI-Linked Floor]				
Interest Commencement Date	For notes that bear interest, the interest commencement date] [For notes that do not bear interest: Not Applicable]				
Interest Payment Dates	For notes that bear interest: [●[●, and ●] with ● and ending with ●] [For notes that do not bear interest: Not	] of each year][every ● days][, beginning Applicable]			
Interest Period	Interest Payment Date (or the Interest C initial Interest Period) to but excluding th	n and including an [originally scheduled] Commencement Date, in the case of the le next succeeding [originally scheduled] scheduled] Stated Maturity Date, in the Applicable]			
Calculation Basis	[Per Denomination] [Notional]				
Regular Record Dates	<ul> <li>[•] [For Global registered notes issued u Business Day(s)</li> </ul>	Inder NSS: 1] [For non-Global notes: 15]			
Additional Redemption Rights at the Option of the Issuer	[Not Applicable] [Applicable] [If Not Applicable, delete the remainder of this row.] [				
		uer's option on the Issuer's Redemption the corresponding Issuer's Redemption			
	Issuer's Redemption Date(s)	Issuer's Redemption Amount			
	[insert [date]/[date range]]	[[•] per cent. of the Face Amount <i>plus</i>			

Issuer's Redemption Date(s)	Issuer's Redemption Amount
[insert [date]/[date range]]	[[•] per cent. of the Face Amount <i>plus</i>
	accrued but unpaid interest to the
	applicable Issuer's Redemption Date]/
	[Make-Whole Redemption Amount]
[insert [date]/[date range]] [repeat as required]	[[•] per cent. of the Face Amount <i>plus</i> accrued but unpaid interest to the
	applicable Issuer's Redemption Date]/
	[Make-Whole Redemption Amount]
	[repeat as required]

**Issuer's Redemption Notice Period**: [*insert* [[•] [Business Days]]/[•] [days]] which shall in no case be fewer than five (5) Business Days]

[If Make Whole Redemption Amount is not specified as the Issuer's Redemption Amount for any Issuer's Redemption Date(s), delete the remainder of this row.]

Redemption Margin: [•] Reference Bond: [•] Quotation Time: [•] Quotation Jurisdiction: [•] Par Call Redemption Date: [Not Applicable] [*Specify*] Make-Whole Day Count Fraction: [1/1 (ISDA)] [Actual/Actual (ISDA)] [Actual/Actual (ICMA)] [Actual/Actual (Bond)] [Actual/Actual (Euro)] [Actual/365 (Fixed)] [Actual/360 (ISDA)] [Actual/360 (ICMA)] [30/360 (ISDA)] Make-Whole Calculation Basis: The Make-Whole Redemption Amount shall be calculated by discounting to the applicable Issuer's Redemption Date on [a/an][annual][semi-annual][quarterly][other] basis ]

## Repurchase at the Holder's[Not Applicable] [Applicable]Option[If Not Applicable, delete the remainder of this row.] [

Your note will be repayable at the Holder's option on the Holder's Redemption Dates specified in the table below at the corresponding Holder's Redemption Amount:

Holder's Redemption Date(s)	Holder's Redemption Amount
[insert [date]/[date range]]	[•] per cent. of the Face Amount <i>plus</i> accrued but unpaid interest to the applicable Holder's Redemption Date
[[insert [date]/[date range]] [repeat as required]	[•] per cent. of the Face Amount <i>plus</i> accrued but unpaid interest to the applicable Holder's Redemption Date] [ <i>repeat as required</i> ]

1

Redemption upon Change in Law

[Not Applicable] [Applicable]

[Not Applicable] [Applicable]

[Not Applicable] [Applicable]

[New York], [London], [Mexico City], [specify]

[Modified] Following [[Adjusted] [Unadjusted]]

Gross-up and Call in the Case of Tax Law Changes

**Business Days** 

**Business Day Convention** 

**Final BDC Procedure** 

Intended to be held in a manner which would allow Eurosystem eligibility

[Yes. Note that the designation "yes" simply means that the Notes are intended upon issue to be deposited with one of the ICSDs as common safekeeper[, and registered in the name of a nominee of one of the ICSDs acting as common safekeeper] [*include this text for Registered Notes which are to be held under the NSS*] and does not necessarily mean that the Notes will be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.]

/[No. Whilst the designation is specified as "no" at the date of these Final Terms, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them the Notes may then be deposited with one of the ICSDs as common safekeeper [, and registered in the name of a nominee of one of the ICSDs acting as common safekeeper] [*include this text for Registered Notes*]. Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem at any time during their life. Such recognition

	will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.]
Form of Notes	Registered global notes only, registered in the name of a nominee of a common depositary or safekeeper for [Euroclear and Clearstream, Luxembourg] [ <i>or specify clearing system</i> ]
Any Clearing System(s) other than Euroclear Bank S.A./N.V. and Clearstream Banking, société anonyme and the relevant identification number(s):	[specify other, give name(s), address(es) and number(s))] [Not Applicable]
Calculation Agent	[Goldman Sachs International] [specify]
Listing and Admission to Trading	[Application [has been][will be] made to the London Stock Exchange for the notes to be admitted to trading on the London Stock Exchange's Main Market and to be listed on the Official List of the London Stock Exchange [with effect from [•]] [When notes are to be fungible with an existing issue, indicate if original notes are already admitted to trading on the London Stock Exchange]
	[ <i>For all other notes:</i> Not applicable: no application has been made or will be made to list the notes for trading on a regulated market]
	[Estimate of total expenses related to admission to trading: [•]
Credit Ratings	The Notes to be issued [have not been rated]/[[have been/are expected to be] rated]/[The following ratings reflect ratings assigned to notes of this type issued under the Program generally]]: [Dominion Bond Rating Service Limited: [ ]] [Fitch, Inc.: [ ]] [Moody's Investors Service: [ ]] [Standard & Poor's: [ ]] [Rating and Investment Information, Inc.]: [ ]] [Other]: [ ]]]
Interests of Natural and Legal Persons Involved in the Issue/Offer	Save for any fees payable to the [Managers]/[Dealers], so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer. The [Managers]/[Dealers] and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform other services for, the Issuer and its affiliates in the ordinary course of business
Section 871(m)	[The Issuer has determined that the notes will not be subject to withholding under Section 871(m) of the U.S. Internal Revenue Code] [ <i>Other</i> ]
[Cut-off Date	Applicable - [•] Business Days] [Not Applicable]
Postponement Following FX Disruption Event and Payments in USD	[Not Applicable] [Applicable] [ <i>If applicable, number of business days (if other than 15) in the definition of</i> <b>FX</b> <i>Disruption Event Cut-Off Date</i> ]
[Third Party Information]	[[Include description of any information sourced from a third party], such information has been accurately reproduced and so far as the Issuer and Guarantor are aware and are able to ascertain from information published by [insert name of third party], no facts have been omitted which would render the reproduced information inaccurate or misleading.]
Names and addresses of additional Paying Agent(s) (if any):	[Specify][Not Applicable]
Post-Issuance Information	[The Issuer does not intend to provide post-issuance information, unless otherwise required by applicable laws and regulations.] [ <i>Specify</i> ]

Final Terms, dated •

#### INFORMATION ABOUT THE UNDERLYER[S]

[where the underlying is an index, the name of the index, including an indication of where the past and potential future performance and volatility of the underlying can be obtained.]

[where the underlying is an interest rate, a description of the interest rate.]

[where the underlying is a basket of underlying, the relevant weightings of each underlying in the basket]

[INDEX DISCLAIMER] [Insert only if applicable]

# Goldman Sachs

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#### THE PRINCIPAL EXECUTIVE OFFICE OF

GS FINANCE CORP. 200 West Street New York, NY 10282 United States of America

#### THE PRINCIPAL OFFICE OF THE GOLDMAN SACHS GROUP, INC.

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#### FISCAL AGENT AND REGISTRAR

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240 Greenwich Street New York, New York 10286 United States of America

#### **PAYING AGENT**

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#### LEGAL ADVISORS TO GS FINANCE CORP. AND THE GOLDMAN SACHS GROUP, INC.

#### As to United States law:

General Counsel or Associate General Counsel GS Finance Corp. 200 West Street New York, NY 10282 United States of America As to United States law (including as to United States Federal Income tax law): Sullivan & Cromwell LLP 1 New Fetter Lane London EC4A 1AN United Kingdom

