

GS FINANCE CORP.

FORM 424B2

(Prospectus filed pursuant to Rule 424(b)(2))

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Telephone	212-902-1000
CIK	0001419828
Symbol	GCEC
SIC Code	6211 - Security Brokers, Dealers and Flotation Companies
Fiscal Year	11/30

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.



Subject to Completion. Dated November 20, 2024.

GS Finance Corp.

\$

Autocallable Variable Coupon Equity-Linked Notes due

guaranteed by

The Goldman Sachs Group, Inc.

The notes do not pay a fixed coupon and may pay only the minimum coupon amount on a payment date. The amount that you will be paid on your notes is based on the performances of the common stock of NVIDIA Corporation, the common stock of Tesla, Inc., the Class A common stock of Vertiv Holdings Co and an American depository share of Arm Holdings plc, representing one ordinary share of Arm Holdings plc. The notes will mature on the stated maturity date (expected to be December 3, 2029), unless automatically called on any observation date, commencing in November 2025 to and including October 2029. Your notes will be automatically called if the closing price of each index stock on any such observation date is *greater than* or *equal* to its initial price (set on the trade date (expected to be November 26, 2024) and will be an intra-day price or the closing price of one share of such index stock on the trade date). If your notes are automatically called, you will receive a payment on the next payment date (the fifth business day after the relevant observation date) equal to the face amount of your notes *plus* a coupon (as described below).

Observation dates are expected to be the 26th day of each month, commencing in December 2024 and ending in November 2029. If on any observation date the closing price of each index stock is *greater than* or *equal* to 80% of its initial price, you will receive on the applicable payment date a coupon for each \$1,000 face amount of your notes equal to (i) the *product* of \$6.959 (0.6959% monthly, or the potential for up to approximately 8.35% per annum) *times* the number of observation dates that have occurred up to and including the relevant observation date *minus* (ii) the *sum* of all coupons previously paid (the maximum coupon amount). If the closing price of any index stock on an observation date is *less than* 80% of its initial price, you will receive on the applicable payment date a coupon of \$0.209 (0.0209% monthly, or the potential for up to approximately 0.25% per annum) for each \$1,000 face amount of your notes (the minimum coupon amount).

At maturity, for each \$1,000 face amount of your notes you will receive \$1,000 plus the final coupon.

You should read the disclosure herein to better understand the terms and risks of your investment, including the credit risk of GS Finance Corp. and The Goldman Sachs Group, Inc. See page S-19.

The estimated value of your notes at the time the terms of your notes are set on the trade date is expected to be between \$885 and \$925 per \$1,000 face amount. For a discussion of the estimated value and the price at which Goldman Sachs & Co. LLC would initially buy or sell your notes, if it makes a market in the notes, see the following page.

Original issue date: expected to be November 29, 2024 **Original issue price:** 100% of the face amount*

Underwriting discount: % of the face amount* **Net proceeds to the issuer:** % of the face amount

* The original issue price will be % for certain investors; see "Supplemental Plan of Distribution" on page S-41 for additional information regarding the fees comprising the underwriting discount.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense. The notes 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.

Goldman Sachs & Co. LLC

Prospectus Supplement No. dated , 2024.

The issue price, underwriting discount and net proceeds listed above relate to the notes we sell initially. We may decide to sell additional notes after the date of this prospectus supplement, at issue prices and with underwriting discounts and net proceeds that differ from the amounts set forth above. The return (whether positive or negative) on your investment in notes will depend in part on the issue price you pay for such notes.

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

Estimated Value of Your Notes

The estimated value of your notes at the time the terms of your notes are set on the trade date (as determined by reference to pricing models used by Goldman Sachs & Co. LLC (GS&Co.) and taking into account our credit spreads) is expected to be between \$885 and \$925 per \$1,000 face amount, which is less than the original issue price. The value of your notes at any time will reflect many factors and cannot be predicted; however, the price (not including GS&Co.'s customary bid and ask spreads) at which GS&Co. would initially buy or sell notes (if it makes a market, which it is not obligated to do) and the value that GS&Co. will initially use for account statements and otherwise is equal to approximately the estimated value of your notes at the time of pricing, plus an additional amount (initially equal to \$ per \$1,000 face amount).

Prior to , the price (not including GS&Co.'s customary bid and ask spreads) at which GS&Co. would buy or sell your notes (if it makes a market, which it is not obligated to do) will equal approximately the sum of (a) the then-current estimated value of your notes (as determined by reference to GS&Co.'s pricing models) plus (b) any remaining additional amount (the additional amount will decline to zero on a straight-line basis from the time of pricing through). On and after , the price (not including GS&Co.'s customary bid and ask spreads) at which GS&Co. would buy or sell your notes (if it makes a market) will equal approximately the then-current estimated value of your notes determined by reference to such pricing models.

About Your Prospectus

The notes are part of the Medium-Term Notes, Series F program of GS Finance Corp. and are fully and unconditionally guaranteed by The Goldman Sachs Group, Inc. This prospectus includes this prospectus supplement and the accompanying documents listed below. This prospectus supplement constitutes a supplement to the documents listed below, does not set forth all of the terms of your notes and therefore should be read in conjunction with such documents:

- [Prospectus supplement dated February 13, 2023](#)
- [Prospectus dated February 13, 2023](#)

The information in this prospectus supplement supersedes any conflicting information in the documents listed above. In addition, some of the terms or features described in the listed documents may not apply to your notes.

We refer to the notes we are offering by this prospectus supplement as the “offered notes” or the “notes”. Each of the offered notes has the terms described below. Please note that in this prospectus supplement, references to “GS Finance Corp.”, “we”, “our” and “us” mean only GS Finance Corp. and do not include its subsidiaries or affiliates, references to “The Goldman Sachs Group, Inc.”, our parent company, mean only The Goldman Sachs Group, Inc. and do not include its subsidiaries or affiliates and references to “Goldman Sachs” mean The Goldman Sachs Group, Inc. together with its consolidated subsidiaries and affiliates, including us. The notes will be issued under the senior debt indenture, dated as of October 10, 2008, as supplemented by the First Supplemental Indenture, dated as of February 20, 2015, each among us, as issuer, The Goldman Sachs Group, Inc., as guarantor, and The Bank of New York Mellon, as trustee. This indenture, as so supplemented and as further supplemented thereafter, is referred to as the “GSFC 2008 indenture” in the accompanying prospectus supplement.

The notes will be issued in book-entry form and represented by master note no. 3, dated March 22, 2021.

TERMS AND CONDITIONS

CUSIP / ISIN: 40058FVV2 / US40058FVV20

Company (Issuer): GS Finance Corp.

Guarantor: The Goldman Sachs Group, Inc.

Index stocks (each individually, an index stock): the common stock of NVIDIA Corporation (current Bloomberg ticker: "NVDA UW"), the common stock of Tesla, Inc. (current Bloomberg ticker: "TSLA UW"), the Class A common stock of Vertiv Holdings Co (current Bloomberg ticker: "VRT UN"), and an American depository share ("ADS") of Arm Holdings plc (current Bloomberg ticker: "ARM UW"), representing one ordinary share of Arm Holdings plc, as each may be replaced or adjusted from time to time as provided herein

Face amount: \$ in the aggregate on the original issue date; the aggregate face amount may be increased if the company, at its sole option, decides to sell an additional amount on a date subsequent to the trade date

Authorized denominations: \$1,000 or any integral multiple of \$1,000 in excess thereof

Principal amount: Subject to redemption by the company as provided under "— Company's redemption right (automatic call feature)" below, on the stated maturity date, in addition to the final coupon, the company will pay, for each \$1,000 of the outstanding face amount, an amount in cash equal to \$1,000.

Company's redemption right (automatic call feature): if a redemption event occurs, then the outstanding face amount will be automatically redeemed in whole and the company will pay, in addition to the coupon then due, an amount in cash on the following call payment date, for each \$1,000 of the outstanding face amount, equal to \$1,000

Redemption event: a redemption event will occur if, as measured on any call observation date, the closing price of each index stock is *greater than or equal to* its initial index stock price

Initial index stock price (set on the trade date): with respect to an index stock, an intra-day price or the closing price of one share of such index stock on the trade date

Coupon: subject to the company's redemption right, on each coupon payment date, for each \$1,000 of the outstanding face amount, the company will pay an amount in cash equal to:

- if the closing price of each index stock on the related coupon observation date is *greater than or equal to* its coupon trigger price, the maximum coupon amount; or
- if the closing price of any index stock on the related coupon observation date is *less than* its coupon trigger price, the minimum coupon amount

The coupon paid on any coupon payment date will be paid to the person in whose name this note is registered as of the close of business on the regular record date for such coupon payment date. If the coupon is due at maturity but on a day that is not a coupon payment date, the coupon will be paid to the person entitled to receive the principal of this note.

Coupon trigger price: for each index stock, 80% of its initial index stock price

Maximum coupon amount: (i) the product of \$6.959 (0.6959% monthly, or the potential for up to approximately 8.35% per annum) *times* the number of coupon observation dates that have occurred up to and including the relevant coupon observation date *minus* (ii) the *sum* of all coupons previously paid

Minimum coupon amount: \$0.209 (0.0209% monthly, or the potential for up to approximately 0.25% per annum)

Trade date: expected to be November 26, 2024

Original issue date (set on the trade date): expected to be November 29, 2024

Determination date (set on the trade date): the last coupon observation date, expected to be November 26, 2029, subject to adjustment as described under "— Coupon observation dates" below

Stated maturity date (set on the trade date): expected to be December 3, 2029, unless that day is not a business day, in which case the stated maturity date will be postponed to the next following business day. The stated maturity date will also be postponed if the determination date is postponed as described under "— Determination date" above. In such a case, the stated maturity date will be postponed by the same number of

business day(s) from but excluding the originally scheduled determination date to and including the actual determination date.

Call observation dates (set on the trade date): expected to be each coupon observation date, commencing in November 2025 and ending in October 2029, subject to adjustment as described under “— Coupon observation dates” below

Call payment dates (set on the trade date): expected to be the fifth business day after each call observation date, subject to adjustment as provided under “— Call observation dates” above

Coupon observation dates (set on the trade date): expected to be the 26th day of each month, commencing in December 2024 and ending in November 2029, unless the calculation agent determines that, with respect to any index stock, a market disruption event occurs or is continuing on that day or that day is not otherwise a trading day.

In the event the originally scheduled coupon observation date is a non-trading day with respect to any index stock, the coupon observation date will be the first day thereafter that is a trading day for all index stocks (the “first qualified coupon trading day”) provided that no market disruption event occurs or is continuing with respect to an index stock on that day. If a market disruption event with respect to an index stock occurs or is continuing on the originally scheduled coupon observation date or the first qualified coupon trading day, the coupon observation date will be the first following trading day on which the calculation agent determines that each index stock has had at least one trading day (from and including the originally scheduled coupon observation date or the first qualified coupon trading day, as applicable) on which no market disruption event has occurred or is continuing and the closing price of each index stock for that coupon observation date will be determined on or prior to the postponed coupon observation date as set forth under “— Consequences of a market disruption event or a non-trading day” below. (In such case, the coupon observation date may differ from the date on which the price of an index stock is determined for the purpose of the calculations to be performed on the coupon observation date.) In no event, however, will the coupon observation date be postponed to a date later than the originally scheduled coupon payment date (based on the originally scheduled coupon observation date) or, if the originally scheduled coupon payment date is not a business day, later than the first business day after the originally scheduled coupon payment date, either due to the occurrence of serial non-trading days or due to the occurrence of one or more market disruption events. On such last possible coupon observation date applicable to the relevant coupon payment date, if a market disruption event occurs or is continuing with respect to an index stock that has not yet had such a trading day on which no market disruption event has occurred or is continuing or if such last possible day is not a trading day with respect to such index stock, that day will nevertheless be the coupon observation date.

Coupon payment dates (set on the trade date): expected to be the fifth business day after each coupon observation date (except that the final coupon payment date will be the stated maturity date), subject to adjustment as described under “— Coupon observation dates” above

Closing price: on any trading day, with respect to an index stock, the closing sale price or last reported sale price, regular way, for such index stock, on a per-share or other unit basis:

- on the principal national securities exchange on which such index stock is listed for trading on that day, or
- if such index stock is not listed on any national securities exchange on that day, on any other U.S. national market system that is the primary market for the trading of such index stock.

If an index stock is not listed or traded as described above, then the closing price for such index stock on any day will be the average, as determined by the calculation agent, of the bid prices for such index stock obtained from as many dealers in such index stock selected by the calculation agent as will make those bid prices available to the calculation agent. The number of dealers need not exceed three and may include the calculation agent or any of its or the company’s affiliates.

The closing price of an index stock is subject to adjustment as described under “— Anti-dilution adjustments” below.

Trading day: with respect to an index stock, a day on which the principal securities market for such index stock is open for trading

Index stock issuer: (i) with respect to an index stock that does not constitute an ADS, the issuer of such index stock as then in effect or (ii) with respect to an index stock that constitutes an ADS, the issuer of the security represented by the ADS as then in effect

Market disruption event: With respect to any given trading day, any of the following will be a market disruption event with respect to an index stock:

- a suspension, absence or material limitation of trading in the index stock on its primary market for more than two consecutive 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,
- a suspension, absence or material limitation of trading in option or futures contracts relating to the index stock in the primary market for those contracts for more than two consecutive 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
- the index stock does not trade on what was the primary market for the index stock, as determined by the calculation agent in its sole discretion,

and, in the case of any of these events, the calculation agent determines in its sole discretion that such event could materially interfere with the ability of the company or any of its affiliates or a similarly situated person to unwind all or a material portion of a hedge that could be effected with respect to this note.

The following events will not be market disruption events:

- a limitation on the hours or numbers of days of trading, but only if the limitation results from an announced change in the regular business hours of the relevant market, and
- a decision to permanently discontinue trading in option or futures contracts relating to an index stock.

For this purpose, an “absence of trading” in the primary securities market on which shares of an index stock are traded, or on which option or futures contracts relating to an index stock 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 shares of an index stock or in option or futures contracts, if available, relating to the index stock in the primary market for that index stock or those contracts, by reason of:

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

will constitute a suspension or material limitation of trading in shares of the index stock or those contracts in that market.

A market disruption event with respect to one index stock will not, by itself, constitute a market disruption event for any unaffected index stock.

Consequences of a market disruption event or a non-trading day: With respect to any index stock, if a market disruption event occurs or is continuing on a day that would otherwise be a coupon observation date, or such day is not a trading day, then such coupon observation date will be postponed as described under “— Coupon observation dates” above. If any coupon observation date is postponed to the last possible date due to the occurrence of serial non-trading days, the price of each index stock will be the calculation agent’s assessment of such price, in its sole discretion, on such last possible postponed coupon observation date. If any coupon observation date is postponed due to a market disruption event with respect to any index stock, the closing price of each index stock with respect to such coupon observation date will be calculated based on (i) for any index stock that is not affected by a market disruption event on the applicable originally scheduled coupon observation date or the first qualified coupon trading day thereafter (if applicable), the closing price of the index stock on that date, (ii) for any index stock that is affected by a market disruption event on the applicable originally scheduled coupon observation date or the first qualified coupon trading day thereafter (if applicable), the closing price of the index stock on the first following trading day on which no market disruption event exists for such index stock and (iii) the calculation agent’s assessment, in its sole discretion, of the price of any index stock on the last possible postponed coupon observation date with respect to such index stock as to which a market disruption event

continues through the last possible postponed coupon observation date. As a result, this could result in the closing price on any coupon observation date of each index stock being determined on different calendar dates. For the avoidance of doubt, once the closing price for an index stock is determined for a coupon observation date, the occurrence of a later market disruption event or non-trading day will not alter such calculation.

Regular record dates: the scheduled business day immediately preceding the day on which payment is to be made (as such payment date may be adjusted)

Anti-dilution adjustments: For purposes of these adjustments with respect to an index stock that is an ADS, except as noted below, all adjustments to the reference amount for the index stock will be made as if the applicable securities represented by the ADS is serving as that index stock. The term “dividend” used herein will mean the dividend paid by the index stock issuer, net of any applicable foreign withholding or similar taxes that would be due on dividends paid to a U.S. person that claims and is entitled to a reduction in such taxes under an applicable income tax treaty, if available.

No adjustment to the ADS price or the reference amount, including those described below, will be made if (i) holders of the ADS are not eligible to participate in any of the transactions described below or (ii) (and to the extent that) the calculation agent determines in its sole discretion that the index stock issuer or the depository for the ADS has adjusted the number of shares of the applicable securities represented by each ADS so that the ADS price would not be affected by the corporate event in question. However, to the extent that the number of shares of the applicable securities represented by each ADS is changed for any other reason, appropriate adjustments to the anti-dilution adjustments described herein (which may include ignoring such provision, if appropriate) will be made to reflect that change.

The calculation agent will adjust the reference amount of an index stock in respect of each event for which adjustment is required under any of the six subsections beginning with “Stock splits” below (and not in respect of any other event). (If more than one such event occurs, the calculation agent shall adjust the reference amount as so provided for each such event, sequentially, in the order in which such events occur, and on a cumulative basis.) Having adjusted the reference amount for any and all such events as so provided, the calculation agent shall determine a closing price for the reference amount as so adjusted on the coupon observation date. (If the reference amount is adjusted pursuant to “Reorganization events” below so as to consist of distribution property, then the closing price on any coupon observation date shall equal the *sum* of the respective closing prices or other values for all such distribution property on such coupon observation date, as provided in “Reorganization events” below.) Having determined the closing price on any coupon observation date, the calculation agent shall use such prices to calculate the coupon, if applicable, or the occurrence of a redemption event. The calculation agent shall make all adjustments no later than the applicable coupon observation date.

Notwithstanding any other provision in this note, if an event for which adjustment is required under any of the six subsections beginning with “Stock splits” below occurs, the calculation agent may make the adjustment and any related determinations and calculations in a manner that differs from that specified in this note as necessary to achieve an equitable result. Upon written request by the holder to the calculation agent, the calculation agent will provide the holder with such information about these adjustments as such agent determines is appropriate.

Stock splits. A stock split is an increase in the number of a corporation’s outstanding shares of stock without any change in its stockholders’ equity. Each outstanding share will be worth less as a result of a stock split. If an index stock is subject to a stock split, then at the opening of business on the first day on which such index stock trades without the right to receive the stock split, the calculation agent will adjust the reference amount to equal the *sum* of the reference amount in effect immediately prior to such adjustment *plus* the *product* of (i) the number of new shares issued in the stock split with respect to one share of such index stock *times* (ii) the reference amount in effect immediately prior to such adjustment. The reference amount will not be adjusted, however, unless such first day occurs after the trade date and on or before the applicable coupon observation date.

Reverse stock splits. A reverse stock split is a decrease in the number of a corporation’s outstanding shares of stock without any change in its stockholders’ equity. Each outstanding share will be worth more as a result of a reverse stock split. If an index stock is subject to a reverse stock split, then once the reverse stock split becomes effective, the calculation agent will adjust the reference amount to equal the *product* of the reference amount in effect immediately prior to such adjustment and the *quotient* of (i) the number of shares of such index stock outstanding immediately after the reverse stock split becomes effective *divided* by (ii) the number of shares of such index stock outstanding immediately before the reverse stock split becomes effective. The reference

amount will not be adjusted, however, unless the reverse stock split becomes effective after the trade date and on or before the applicable coupon observation date.

Stock dividends. In a stock dividend, a corporation issues additional shares of its stock to all holders of its outstanding shares of its stock in proportion to the shares they own. Each outstanding share will be worth less as a result of a stock dividend. If an index stock is subject to a stock dividend that is given ratably to all holders of such index stock, then at the opening of business on the ex-dividend date, the calculation agent will adjust the reference amount to equal the reference amount in effect immediately prior to such adjustment *plus* the *product* of (i) the number of shares issued in the stock dividend with respect to one share of such index stock *times* (ii) the reference amount in effect immediately prior to such adjustment. The reference amount will not be adjusted, however, unless such ex-dividend date occurs after the trade date and on or before the applicable coupon observation date.

Other dividends and distributions. There will be no adjustments to the reference amount to reflect dividends or other distributions paid with respect to an index stock other than:

- stock dividends as provided in “Stock dividends” above,
- issuances of transferable rights or warrants as provided in “Transferable rights and warrants” below,
- dividends or other distributions constituting spin-off events as provided in “Reorganization events” below, or
- extraordinary dividends described below.

A dividend or other distribution with respect to an index stock will be deemed to be an “extraordinary dividend” if its per share value of such dividend or other distribution exceeds the per share value of the immediately preceding dividend or distribution with respect to such index stock, if any, that is not an extraordinary dividend by an amount equal to at least 10% of the closing price of such index stock on the trading day immediately preceding the ex-dividend date for such extraordinary dividend.

If an extraordinary dividend occurs with respect to an index stock, the calculation agent will adjust the reference amount to equal the *product* of (a) the reference amount in effect immediately prior to such adjustment and (b) a fraction, the numerator of which is the closing price of such index stock on the trading day immediately preceding the ex-dividend date and the denominator of which is the amount by which such closing price exceeds the extraordinary dividend amount.

The “extraordinary dividend amount” with respect to an extraordinary dividend for an index stock will equal:

- in the case of an extraordinary dividend that is paid in lieu of a regular quarterly dividend, the amount per share of such extraordinary dividend *minus* the amount per share of the immediately preceding dividend or distribution with respect to such index stock, if any, that is not an extraordinary dividend or
- in the case of an extraordinary dividend that is not paid in lieu of a regular quarterly dividend, the amount per share of such extraordinary dividend.

To the extent an extraordinary dividend is not paid in cash, the value of the non-cash component will be determined by the calculation agent. A distribution on an index stock that constitutes a stock dividend, an issuance of transferable rights or warrants or a spin-off event and also constitutes an extraordinary dividend will result only in an adjustment to the reference amount pursuant to “Stock dividends” above, “Transferable rights and warrants” below or “Reorganization events” below, as applicable. The reference amount will not be adjusted pursuant to this subsection unless the ex-dividend date for the extraordinary dividend occurs after the trade date and on or before the applicable coupon observation date.

Transferable rights and warrants. With respect to an index stock, if the index stock issuer issues transferable rights or warrants to all holders of the index stock to subscribe for or purchase the index stock at an exercise price per share less than the closing price of the index stock on the trading day immediately before the ex-dividend date for such issuance, then the calculation agent will adjust the reference amount by *multiplying* the reference amount in effect immediately prior to such adjustment by a fraction:

- the numerator of which is the number of shares of index stock outstanding at the close of business on the day before such ex-dividend date *plus* the number of additional shares of index stock offered for subscription or purchase under such transferable rights or warrants, and

- the denominator of which is the number of shares of index stock outstanding at the close of business on the day before such ex-dividend date *plus* the number of additional shares of index stock that the aggregate offering price of the total number of shares of index stock so offered for subscription or purchase would purchase at the closing price of the index stock on the trading day immediately before such ex-dividend date, with such number of additional shares being determined by *multiplying* the total number of shares so offered by the exercise price of such transferable rights or warrants and *dividing* the resulting *product* by the closing price of the index stock on the trading day immediately before such ex-dividend date.

The reference amount will not be adjusted, however, unless such ex-dividend date occurs after the trade date and on or before the applicable coupon observation date.

Reorganization events. With respect to an index stock, if:

- any reclassification or other change of the index stock occurs,
- such index stock is an ADS and is no longer listed or admitted to trading on a U.S. securities exchange or the ADS deposit agreement between the issuer of the security represented by the ADS and the ADS depository is terminated for any reason,
- the index stock issuer has been subject to a merger, consolidation, amalgamation, binding share exchange or other business combination and is not the surviving entity or it does survive but all the shares of index stock are reclassified or changed,
- the index stock has been subject to a takeover, tender offer, exchange offer, solicitation proposal or other event by another person to purchase or otherwise obtain all of the outstanding shares of the index stock, such that all of the outstanding shares of the index stock (other than shares of the index stock owned or controlled by such other person) are transferred, or irrevocably committed to be transferred, to another person,
- the index stock issuer or any subsidiary of the index stock issuer has been subject to a merger, consolidation, amalgamation or binding share exchange in which the index stock issuer is the surviving entity and all the outstanding shares of the index stock (other than shares of the index stock owned or controlled by such other person) immediately prior to such event collectively represent less than 50% of the outstanding shares of the index stock immediately following such event,
- the index stock issuer sells or otherwise transfers its property and assets as an entirety or substantially as an entirety to another entity
- the index stock issuer issues to all holders of index stock equity securities of an issuer other than the index stock issuer (other than in a transaction described in any of the bullet points above) (a "spin-off event"),
- the index stock issuer is liquidated, dissolved or wound up or is subject to a proceeding under any applicable bankruptcy, insolvency or other similar law, or
- any other corporate or similar events that affect or could potentially affect market prices of, or shareholders' rights in, the index stock or distribution property, which will be substantiated by an official characterization by either the Options Clearing Corporation with respect to options contracts on the index stock or by the primary securities exchange on which the index stock or listed options on the index stock are traded, and will ultimately be determined by the calculation agent in its sole discretion (any such event in this bullet point or any of the bullet points above in this subsection, a "reorganization event"),

then the calculation agent will adjust the reference amount so that the reference amount consists of the respective amounts of each type of distribution property deemed, for the purposes of this note, to be distributed in such reorganization event in respect of the reference amount as in effect immediately prior to such adjustment, taken together.

Notwithstanding the foregoing, however, the calculation agent will not make any adjustment for a reorganization event unless the event becomes effective — or, if the event is a spin-off event, unless the ex-dividend date for the spin-off event occurs — after the trade date and on or before the applicable coupon observation date.

The calculation agent will determine the value of each component type of distribution property, using the closing price on the relevant day for any such type consisting of securities and such other method as it determines to be appropriate, in its sole discretion, for any other type. If a holder of an index stock may elect to receive different types or combinations of types of distribution property in the reorganization event, the distribution property will be

deemed to include the types and amounts thereof distributed to a holder that makes no election, as determined by the calculation agent in its sole discretion. If a reorganization event occurs and as a result the reference amount is adjusted to consist of distribution property, the calculation agent will make further adjustments for subsequent events that affect such distribution property or any component type thereof, to the same extent that it would make adjustments if an index stock were outstanding and were affected by the same kinds of events. The closing price on a coupon observation date will be the total value, as determined by the calculation agent at the close of trading hours of an index stock on such coupon observation date, of all components of the reference amount, with each component having been adjusted on a sequential and cumulative basis for all relevant events affecting it.

The calculation agent may, in its sole discretion, modify the adjustments described in "Reorganization events" as necessary to ensure an equitable result.

If at any time the reference amount consists of distribution property, as determined by the calculation agent, then all references in this note to an "index stock" shall thereupon be deemed to mean such distribution property and all references in this note to a "share of index stock" shall thereupon be deemed to mean a comparable unit of each type of property comprising such distribution property, as determined by the calculation agent.

Minimum adjustments. Notwithstanding the foregoing, no adjustment will be required in respect of any event specified in "Stock splits", "Reverse stock splits", "Stock dividends", "Other dividends and distributions" and "Transferable rights and warrants" above unless such adjustment would result in a change of at least 0.1% in the closing price of such index stock. The closing price of an index stock resulting from any adjustment shall be rounded up or down, as appropriate, to the nearest ten-thousandth, with five hundred-thousandths being rounded upward — e.g., 0.12344 will be rounded down to 0.1234 and 0.12345 will be rounded up to 0.1235.

Distribution property: cash, securities and/or other property distributed in any reorganization event in respect of the relevant reference amount and, in the case of a spin-off event, includes such reference amount

Ex-dividend date: for any dividend or other distribution with respect to an index stock, the first day on which the index stock trades without the right to receive such dividend or other distribution

Reference amount: with respect to an index stock, initially, one share of such index stock which shall be adjusted, as to the amount(s) and/or type(s) of property comprising the same, by the calculation agent as provided under "Anti-dilution adjustments" above

Business day: each Monday, Tuesday, Wednesday, Thursday and Friday that 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. A day is a scheduled business day if, as of the trade date, such day is scheduled to be a Monday, Tuesday, Wednesday, Thursday or Friday that 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.

Calculation agent: Goldman Sachs & Co. LLC ("GS&Co.")

Default amount: If an event of default occurs and the maturity of this note is accelerated, the company will pay the default amount in respect of the principal of this note at the maturity, instead of the amount payable on the stated maturity date as described earlier. The default amount for the notes on any day (except as provided in the last sentence under "Default quotation period" below) will be an amount, in U.S. dollars, for the face amount of this note, equal to the cost of having a qualified financial institution, of the kind and selected as described below, expressly assume all of the company's payment and other obligations with respect to this note as of that day and as if no default or acceleration had occurred, or to undertake other obligations providing substantially equivalent economic value to you with respect to this note. That cost will equal:

- the lowest amount that a qualified financial institution would charge to effect this assumption or undertaking, *plus*
- the reasonable expenses, including reasonable attorneys' fees, incurred by the holder of this note in preparing any documentation necessary for this assumption or undertaking.

During the default quotation period for this note, which is described below, the holder of the notes and/or the company may request a qualified financial institution to provide a quotation of the amount it would charge to effect this assumption or undertaking. If either party obtains a quotation, it must notify the other party in writing of the quotation. The amount referred to in the first bullet point above will equal the lowest — or, if there is only one, the only — quotation obtained, and as to which notice is so given, during the default quotation period. With respect to any quotation, however, the party not obtaining the quotation may object, on reasonable and significant grounds,

to the assumption or undertaking by the qualified financial institution providing the quotation and notify the other party in writing of those grounds within two business days after the last day of the default quotation period, in which case that quotation will be disregarded in determining the default amount.

Default quotation period: The default quotation period is the period beginning on the day the default amount first becomes due and ending on the third business day after that day, unless:

- no quotation of the kind referred to above is obtained, or
- every quotation of that kind obtained is objected to within five business days after the day the default amount first becomes due.

If either of these two events occurs, the default quotation period will continue until the third business day after the first business day on which prompt notice of a quotation is given as described above. If that quotation is objected to as described above within five business days after that first business day, however, the default quotation period will continue as described in the prior sentence and this sentence.

In any event, if the default quotation period and the subsequent two business day objection period have not ended before the determination date, then the default amount will equal the principal amount of this note.

Qualified financial institutions: For the purpose of determining the default amount at any time, a qualified financial institution must be a financial institution organized under the laws of any jurisdiction in the United States of America, Europe or Japan, which at that time has outstanding debt obligations with a stated maturity of one year or less from the date of issue and that is, or whose securities are, rated *either*:

- A-1 or higher by Standard & Poor's Ratings Services or any successor, or any other comparable rating then used by that rating agency, or
- P-1 or higher by Moody's Investors Service, Inc. or any successor, or any other comparable rating then used by that rating agency.

Overdue principal rate and overdue coupon rate: the effective Federal Funds rate

Defeasance: not applicable

DEFAULT AMOUNT ON ACCELERATION

If an event of default occurs and the maturity of your notes is accelerated, the company will pay the default amount in respect of the principal of your notes at the maturity, instead of the amount payable on the stated maturity date as described earlier. We describe the default amount under “Terms and Conditions” above.

For the purpose of determining whether the holders of our Series F medium-term notes, which include your notes, are entitled to take any action under the indenture, we will treat the outstanding face amount of your notes as the outstanding principal amount of that note. Although the terms of the offered notes differ from those of the other Series F medium-term notes, holders of specified percentages in principal amount of all Series F medium-term notes, together in some cases with other series of our debt securities, will be able to take action affecting all the Series F medium-term notes, including your notes, except with respect to certain Series F medium-term notes if the terms of such notes specify that the holders of specified percentages in principal amount of all of such notes must also consent to such action. This action may involve changing some of the terms that apply to the Series F medium-term notes or waiving some of our obligations under the indenture. In addition, certain changes to the indenture and the notes that only affect certain debt securities may be made with the approval of holders of a majority in principal amount of such affected debt securities. We discuss these matters in the accompanying prospectus under “Description of Debt Securities We May Offer — Default, Remedies and Waiver of Default” and “Description of Debt Securities We May Offer — Modification of the Debt Indentures and Waiver of Covenants”.

HYPOTHETICAL EXAMPLES

Payment Examples

The following examples are provided for purposes of illustration only. They should not be taken as an indication or prediction of future investment results and are intended merely to illustrate the impact that various hypothetical closing prices of the index stocks on a coupon observation date could have on the coupon payable on the related coupon payment date assuming all other variables remain constant.

The examples below are based on a range of index stock prices that are entirely hypothetical; no one can predict what the closing price of any index stock will be on any day throughout the life of your notes and what the closing price of any index stock will be on any coupon observation date or call observation date, as the case may be. The index stocks have been highly volatile in the past — meaning that the index stock prices have changed substantially in relatively short periods — and their performance cannot be predicted for any future period.

The information in the following examples reflects hypothetical rates of return on the offered notes assuming that they are purchased on the original issue date at the face amount and held to a call payment date or the stated maturity date. If you sell your notes in a secondary market prior to a call payment date or the stated maturity date, as the case may be, your return will depend upon the market value of your notes at the time of sale, which may be affected by a number of factors that are not reflected in the examples below such as interest rates, the volatility of the index stocks, the creditworthiness of GS Finance Corp., as issuer, and the creditworthiness of The Goldman Sachs Group, Inc., as guarantor. In addition, the estimated value of your notes at the time the terms of your notes are set on the trade date (as determined by reference to pricing models used by GS&Co.) is less than the original issue price of your notes. For more information on the estimated value of your notes, see “Additional Risk Factors Specific to Your Notes — The Estimated Value of Your Notes At the Time the Terms of Your Notes Are Set On the Trade Date (as Determined By Reference to Pricing Models Used By GS&Co.) Is Less Than the Original Issue Price Of Your Notes” on page S-19 of this prospectus supplement. The information in the examples also reflects the key terms and assumptions in the box below.

Key Terms and Assumptions	
Face amount	\$1,000
Maximum coupon amount	(i) the <i>product</i> of \$6.959 (0.6959% monthly, or the potential for up to approximately 8.35% per annum) <i>times</i> the number of coupon observation dates that have occurred up to and including the relevant coupon observation date <i>minus</i> (ii) the <i>sum</i> of all coupons previously paid
Minimum coupon amount	\$0.209 (0.0209% monthly, or the potential for up to approximately 0.25% per annum)
Coupon trigger price	with respect to each index stock, 80% of its initial index stock price
The notes are not automatically called, unless otherwise indicated below	
Neither a market disruption event nor a non-trading day occurs on any originally scheduled coupon observation date or call observation date	
No change in or affecting any of the index stocks	
Notes purchased on original issue date at the face amount and held to a call payment date or the stated maturity date	

Moreover, we have not yet set the initial index stock prices that will serve as the baseline for determining the coupon payable on each coupon payment date, if the notes will be automatically called and the amount that we will pay on your notes, if any, on the call payment date or at maturity. We will not do so until the trade date. As a result, the actual initial index stock prices may differ substantially from the index stock prices prior to the trade date. They may also differ substantially from the index stock prices at the time you purchase your notes.

For these reasons, the actual performance of the index stocks over the life of your notes, the actual index stock prices on any call observation date or coupon observation date, as well as the coupon payable on each coupon payment date, may bear little relation to the hypothetical examples shown below or to the historical index stock prices shown elsewhere in this prospectus supplement. For information about the index stock prices during recent

periods, see “The Index Stocks — Historical Closing Prices of the Index Stocks” on page S-31. Before investing in the notes, you should consult publicly available information to determine the index stock prices between the date of this prospectus supplement and the date of your purchase of the notes.

Also, the hypothetical examples shown below do not take into account the effects of applicable taxes. Because of the U.S. tax treatment applicable to your notes, tax liabilities could affect the after-tax rate of return on your notes to a comparatively greater extent than the after-tax return on the index stocks.

Hypothetical Coupon Payments

The examples below show the hypothetical performances of each index stock as well as the hypothetical coupons that we would pay on each coupon payment date with respect to each \$1,000 face amount of the notes if the hypothetical closing price of each index stock on the applicable coupon observation date was the percentage of its initial index stock price shown.

Scenario 1

Hypothetical Coupon Observation Date	Hypothetical Closing Price of the Common Stock of NVIDIA Corporation (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of the Common Stock of Tesla, Inc. (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of the Class A Common Stock of Vertiv Holdings Co (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of an ADS of Arm Holdings plc (as Percentage of Initial Index Stock Price)	Hypothetical Coupon
First	95%	85%	90%	95%	\$6.959
Second	55%	55%	65%	55%	\$0.209
Third	90%	85%	85%	90%	\$13.709
Fourth	45%	45%	60%	45%	\$0.209
Fifth	40%	40%	60%	40%	\$0.209
Sixth	45%	45%	50%	45%	\$0.209
Seventh	45%	35%	40%	45%	\$0.209
Eighth	45%	45%	60%	45%	\$0.209
Ninth	45%	25%	90%	45%	\$0.209
Tenth	45%	15%	80%	45%	\$0.209
Eleventh	85%	85%	40%	85%	\$0.209
Twelfth- Sixtieth	45%	95%	90%	45%	\$0.209
				Total Hypothetical Coupons	\$32.79

In Scenario 1, the hypothetical closing price of each index stock increases and decreases by varying amounts on each hypothetical coupon observation date. Because the hypothetical closing price of each index stock on the first and third hypothetical coupon observation dates is *greater than or equal* to its coupon trigger price, the maximum coupon amount will be paid with respect to the first and third coupon observation dates. However, because the hypothetical closing price of at least one index stock on each other hypothetical coupon observation date is less than its coupon trigger price, only the minimum coupon amount will be paid with respect to each such other hypothetical coupon observation date. The total hypothetical coupons paid in Scenario 1 is \$32.79.

Scenario 2

Hypothetical Coupon Observation Date	Hypothetical Closing Price of the Common Stock of NVIDIA Corporation (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of the Common Stock of Tesla, Inc.(as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of the Class A Common Stock of Vertiv Holdings Co (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of an ADS of Arm Holdings plc (as Percentage of Initial Index Stock Price)	Hypothetical Coupon
First	45%	45%	55%	45%	\$0.209
Second	45%	45%	65%	45%	\$0.209
Third	40%	50%	50%	50%	\$0.209
Fourth	50%	50%	60%	50%	\$0.209
Fifth	45%	75%	60%	75%	\$0.209
Sixth	45%	45%	40%	45%	\$0.209
Seventh	55%	35%	30%	35%	\$0.209
Eighth	45%	45%	60%	45%	\$0.209
Ninth	45%	55%	70%	55%	\$0.209
Tenth	45%	45%	60%	45%	\$0.209
Eleventh	85%	25%	80%	25%	\$0.209
Twelfth- Sixtieth	45%	45%	60%	45%	\$0.209
Total Hypothetical Coupons					\$12.54

In Scenario 2, the hypothetical closing price of each index stock increases and decreases by varying amounts on each hypothetical coupon observation date. Because in each case the hypothetical closing price of at least one index stock on the related coupon observation date is less than its coupon trigger price, only the minimum coupon amount will be paid with respect to each hypothetical coupon observation date. The total hypothetical coupons paid in Scenario 2 is \$12.54.

Scenario 3

Hypothetical Coupon Observation Date	Hypothetical Closing Price of the Common Stock of NVIDIA Corporation (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of the Common Stock of Tesla, Inc.(as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of the Class A Common Stock of Vertiv Holdings Co (as Percentage of Initial Index Stock Price)	Hypothetical Closing Price of an ADS of Arm Holdings plc (as Percentage of Initial Index Stock Price)	Hypothetical Coupon
First	35%	45%	35%	45%	\$0.209
Second	65%	45%	55%	45%	\$0.209
Third	45%	20%	50%	20%	\$0.209
Fourth	40%	50%	60%	50%	\$0.209
Fifth	30%	45%	25%	45%	\$0.209
Sixth	35%	65%	45%	65%	\$0.209
Seventh	65%	55%	55%	55%	\$0.209
Eighth	45%	35%	70%	35%	\$0.209
Ninth	40%	45%	30%	45%	\$0.209
Tenth	30%	85%	25%	85%	\$0.209
Eleventh	35%	85%	45%	85%	\$0.209
Twelfth	115%	105%	110%	105%	\$81.209
Total Hypothetical Coupons					\$83.508

In Scenario 3, the hypothetical closing price of each index stock is less than its coupon trigger price on the first eleven hypothetical coupon observation dates, but increases to a price that is *greater than* its initial index stock price on the twelfth hypothetical coupon observation date. Because the hypothetical closing price of at least one index stock on each of the first eleven hypothetical coupon observation dates is less than its coupon trigger price, only the minimum coupon amount will be paid with respect to the first eleven hypothetical coupon observation dates. Because the hypothetical closing price of each index stock is *greater than or equal to* its initial index stock price on the twelfth hypothetical coupon observation date (which is also the first hypothetical call observation

date), your notes will be automatically called. Therefore, on the corresponding hypothetical call payment date, in addition to the maximum coupon amount, you will receive an amount in cash equal to \$1,000 for each \$1,000 face amount of your notes.

Payments on the notes are economically equivalent to the amounts that would be paid on a combination of other instruments. For example, payments on the notes are economically equivalent to a combination of an interest-bearing bond bought by the holder and one or more options entered into between the holder and us (with one or more implicit option premiums paid over time). The discussion in this paragraph does not modify or affect the terms of the notes or the U.S. federal income tax treatment of the notes, as described elsewhere in this prospectus supplement.

We cannot predict the actual closing prices of the index stocks on any day or what the market value of your notes will be on any particular trading day, nor can we predict the relationship between the closing prices of the index stocks and the market value of your notes at any time prior to the stated maturity date. The actual coupon payment that a holder of the notes will receive on each coupon payment date and the rate of return on the offered notes will depend on whether or not the notes are automatically called and the actual initial index stock prices, which we will set on the trade date, and on the actual closing prices of the index stocks on the coupon observation dates determined by the calculation agent as described above. Moreover, the assumptions on which the hypothetical examples are based may turn out to be inaccurate. Consequently, the coupons to be paid in respect of your notes may be very different from the information reflected in the examples above.

Anti-dilution Adjustment Examples

The calculation agent will adjust the closing price of an index stock on a coupon observation date only if an event described under one of the six subsections beginning with “Stock splits” under “Terms and Conditions — Anti-dilution adjustments” occurs and only if the relevant event occurs during the period described under the applicable subsection. The adjustments described under “Terms and Conditions — Anti-dilution adjustments” do not cover all events that could affect the closing price of an index stock on a coupon observation date, such as an issuer tender or exchange offer for such index stock at a premium to its market price or a tender or exchange offer made by a third party for less than all outstanding shares of such index stock. We describe the risks relating to dilution under “Additional Risk Factors Specific to Your Notes — You Have Limited Anti-dilution Protection” below.

For purposes of these adjustments, except as noted below, all adjustments to the reference amount (described under “— How Adjustments Will Be Made”) will be made as if the applicable securities represented by the ADS are serving as that index stock. Therefore, for example, if a security represented by the ADS is subject to a two-for-one stock split and assuming the reference amount for such index stock is equal to one, the reference amount for that index stock would be adjusted to equal two.

How Adjustments Will Be Made

In this prospectus supplement, we refer to anti-dilution adjustment of the closing price of an index stock on a coupon observation date. With respect to an index stock, if an event requiring anti-dilution adjustment occurs, the calculation agent will make the adjustment by taking the following steps:

Step One. The calculation agent will adjust the reference amount. This term refers to the amount of the index stock or other property that must be used to determine the closing price of the index stock on a coupon observation date. For example, if no adjustment described under “Terms and Conditions — Anti-dilution adjustments” is required at a time, the reference amount for that time will be one share of the index stock. In that case, the closing price of the index stock on a coupon observation date will be the closing price of one share of the index stock on the applicable coupon observation date. We describe how the closing price will be determined under “Terms and Conditions — Closing price” above.

If an adjustment described under “Terms and Conditions — Anti-dilution adjustments” is required because one of the dilution events described in the first five subsections beginning with “Stock splits” under “Terms and Conditions — Anti-dilution adjustments” — these involve stock splits, reverse stock splits, stock dividends, other dividends and distributions and issuances of transferable rights and warrants — occurs, then the adjusted reference amount at that time might instead be, for example, two shares of the index stock or a half share of the index stock, depending on the event. In that example, the closing price of the index stock on a coupon observation date would be the price (determined as specified under “Terms and Conditions — Closing price” above) at the close of trading on the applicable coupon observation date of two shares of the index stock or a half share of the index stock.

If an adjustment described under “Terms and Conditions — Anti-dilution adjustments” is required at a time because one of the reorganization events described under “Terms and Conditions — Reorganization events” — these involve events in which cash, securities or other property is distributed in respect of the index stock — occurs, then the reference amount at that time will be adjusted to be as follows, assuming there has been no prior or subsequent anti-dilution adjustment: the amount of each type of the property distributed in the reorganization event in respect of one share of the index stock, plus one share of the index stock if the index stock remains outstanding. In that event, the closing price of the index stock on a coupon observation date would be the value of the adjusted reference amount at the close of trading on such coupon observation date.

The manner in which the calculation agent adjusts the reference amount in step one will depend on the type of dilution event requiring adjustment. These events and the nature of the required adjustments are described in the six subsections beginning with “Stock splits” under “Terms and Conditions — Anti-dilution adjustments”.

Step Two. Having adjusted the reference amount in step one, the calculation agent will determine the closing price of the index stock on a coupon observation date in the following manner.

If the adjusted reference amount at the applicable time consists entirely of shares of the index stock, the index stock price will be the closing price (determined as described under “Terms and Conditions — Closing price” above) of the adjusted reference amount on the applicable date.

On the other hand, if the adjusted reference amount at the applicable time includes any property other than shares of the index stock, the closing price of the index stock on a coupon observation date will be the value of the adjusted reference amount as determined by the calculation agent in the manner described under “— Adjustments for Reorganization Events” below at the applicable time.

Step Three. Having determined the closing price of the index stock on a coupon observation date in step two, the calculation agent will use such price to calculate the coupon payable on the applicable coupon payment date.

If more than one event requiring adjustment as described under “Terms and Conditions — Anti-dilution adjustments” occurs, the calculation agent will first adjust the reference amount as described in step one above for each event, sequentially, in the order in which the events occur, and on a cumulative basis. Thus, having adjusted the reference amount for the first event, the calculation agent will repeat step one for the second event, applying the required adjustment to the reference amount as already adjusted for the first event, and so on for each event. Having adjusted the reference amount for all events, the calculation agent will then take the remaining applicable steps in the process described above, determining the closing price of the index stock on a coupon observation date using the reference amount as sequentially and cumulatively adjusted for all the relevant events. The calculation agent will make all required determinations and adjustments no later than the applicable coupon observation date.

The calculation agent will adjust the reference amount for each reorganization event described under “Terms and Conditions — Reorganization events” above. For any other dilution event described above, however, the calculation agent will not be required to adjust the reference amount unless the adjustment would result in a change of at least 0.1% in the index stock price that would apply without the adjustment. The closing price of the index stock on a coupon observation date resulting from any adjustment will be rounded up or down, as appropriate, to the nearest ten-thousandth, with five hundred-thousandths being rounded upward — e.g., 0.12344 will be rounded down to 0.1234 and 0.12345 will be rounded up to 0.1235.

If an event requiring anti-dilution adjustment occurs, the calculation agent will make the adjustment with a view to offsetting, to the extent practical, any change in the economic position of the holder, GS Finance Corp., as issuer, and The Goldman Sachs Group, Inc., as guarantor, relative to your notes, that results solely from that event. The calculation agent may, in its sole discretion, modify the anti-dilution adjustments as necessary to ensure an equitable result.

The calculation agent will make all determinations with respect to anti-dilution adjustments, including any determination as to whether an event requiring adjustment has occurred, as to the nature of the adjustment required and how it will be made or as to the value of any property distributed in a reorganization event, and will do so in its sole discretion. In the absence of manifest error, those determinations will be conclusive for all purposes and will be binding on you and us, without any liability on the part of the calculation agent. The calculation agent will provide information about the adjustments it makes upon written request by the holder.

In this prospectus supplement, when we say that the calculation agent will adjust the reference amount for one or more dilution events, we mean that the calculation agent will take all the applicable steps described above with respect to those events.

The six subsections beginning with “Stock splits” under “Terms and Conditions — Anti-dilution adjustments” describe the dilution events for which the reference amount is to be adjusted. Each subsection describes the manner in which the calculation agent will adjust the reference amount — the first step in the adjustment process described above — for the relevant event.

Adjustments for Reorganization Events

If a reorganization event occurs, then the calculation agent will adjust the reference amount so that it consists of the amount of each type of distribution property described under “Terms and Conditions — Reorganization events” above distributed in respect of one share of an index stock — or in respect of whatever the prior reference amount may be — in the reorganization event, taken together. For purposes of the three-step adjustment process described under “— How Adjustments Will Be Made” above, the distribution property so distributed will be the adjusted reference amount described in step one, the value of that property at the close of trading hours for an index stock on the applicable date will be the index stock price described in step two, and the calculation agent will determine the coupon payable on a coupon payment date as described in step three. As described under “—

How Adjustments Will Be Made” above, the calculation agent may, in its sole discretion, modify the adjustments described in this paragraph as necessary to ensure an equitable result.

The calculation agent will determine the value of each type of distribution property in its sole discretion. For any distribution property consisting of a security, the calculation agent will use the closing price (calculated according to the same methodology as specified in this prospectus supplement, without any anti-dilution adjustments) of one share of such security on the applicable date. The calculation agent may value other types of property in any manner it determines, in its sole discretion, to be appropriate. If a holder of an index stock may elect to receive different types or combinations of types of distribution property in the reorganization event, the distribution property will consist of the types and amounts of each type distributed to a holder that makes no election, as determined by the calculation agent in its sole discretion. As described under “— How Adjustments Will Be Made” above, the calculation agent may, in its sole discretion, modify the adjustments described in this paragraph as necessary to ensure an equitable result.

If a reorganization event occurs and the calculation agent adjusts the reference amount to consist of the distribution property distributed in the reorganization event, as described above, the calculation agent will make any further anti-dilution adjustments for later events that affect the distribution property, or any component of the distribution property, comprising the new reference amount. The calculation agent will do so to the same extent that it would make adjustments if an index stock were outstanding and were affected by the same kinds of events. If a subsequent reorganization event affects only a particular component of the reference amount, the required adjustment will be made with respect to that component, as if it alone were the reference amount.

For example, if an index stock issuer merges into another company and each share of such index stock is converted into the right to receive two common shares of the surviving company and a specified amount of cash, the reference amount will be adjusted to consist of two common shares of the surviving company and the specified amount of cash for each share of index stock (adjusted proportionately for any partial share) comprising the reference amount before the adjustment. The calculation agent will adjust the common share component of the adjusted reference amount to reflect any later stock split or other event, including any later reorganization event, that affects the common shares of the surviving company, to the extent described in this subsection entitled “— Anti-dilution Adjustment Examples” as if the common shares of the surviving company were such index stock. In that event, the cash component will not be adjusted but will continue to be a component of the reference amount. Consequently, each component included in the reference amount will be adjusted on a sequential and cumulative basis for all relevant events requiring adjustment up to the relevant date.

The calculation agent will not make any adjustment for a reorganization event, however, unless the event becomes effective (or, if the event is a spin-off, unless the ex-dividend date for the spin-off occurs) after the trade date and on or before the applicable coupon observation date.

ADDITIONAL RISK FACTORS SPECIFIC TO YOUR NOTES

An investment in your notes is subject to the risks described below, as well as the risks and considerations described in the accompanying prospectus and in the accompanying prospectus supplement. You should carefully review these risks and considerations as well as the terms of the notes described herein and in the accompanying prospectus and the accompanying prospectus supplement. Your notes are a riskier investment than ordinary debt securities. Also, your notes are not equivalent to investing directly in the index stocks. You should carefully consider whether the offered notes are appropriate given your particular circumstances.

Risks Related to Structure, Valuation and Secondary Market Sales

The Estimated Value of Your Notes At the Time the Terms of Your Notes Are Set On the Trade Date (as Determined By Reference to Pricing Models Used By GS&Co.) Is Less Than the Original Issue Price Of Your Notes

The original issue price for your notes exceeds the estimated value of your notes as of the time the terms of your notes are set on the trade date, as determined by reference to GS&Co.'s pricing models and taking into account our credit spreads. Such estimated value on the trade date is set forth above under "Estimated Value of Your Notes"; after the trade date, the estimated value as determined by reference to these models will be affected by changes in market conditions, the creditworthiness of GS Finance Corp., as issuer, the creditworthiness of The Goldman Sachs Group, Inc., as guarantor, and other relevant factors. The price at which GS&Co. would initially buy or sell your notes (if GS&Co. makes a market, which it is not obligated to do), and the value that GS&Co. will initially use for account statements and otherwise, also exceeds the estimated value of your notes as determined by reference to these models. As agreed by GS&Co. and the distribution participants, this excess (i.e., the additional amount described under "Estimated Value of Your Notes") will decline to zero on a straight line basis over the period from the date hereof through the applicable date set forth above under "Estimated Value of Your Notes". Thereafter, if GS&Co. buys or sells your notes it will do so at prices that reflect the estimated value determined by reference to such pricing models at that time. The price at which GS&Co. will buy or sell your notes at any time also will reflect its then current bid and ask spread for similar sized trades of structured notes.

In estimating the value of your notes as of the time the terms of your notes are set on the trade date, as disclosed above under "Estimated Value of Your Notes", GS&Co.'s pricing models consider certain variables, including principally our credit spreads, interest rates (forecasted, current and historical rates), volatility, price-sensitivity analysis and the time to maturity of the notes. These pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. As a result, the actual value you would receive if you sold your notes in the secondary market, if any, to others may differ, perhaps materially, from the estimated value of your notes determined by reference to our models due to, among other things, any differences in pricing models or assumptions used by others. See "— The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors" below.

The difference between the estimated value of your notes as of the time the terms of your notes are set on the trade date and the original issue price is a result of certain factors, including principally the underwriting discount and commissions, the expenses incurred in creating, documenting and marketing the notes, and an estimate of the difference between the amounts we pay to GS&Co. and the amounts GS&Co. pays to us in connection with your notes. We pay to GS&Co. amounts based on what we would pay to holders of a non-structured note with a similar maturity. In return for such payment, GS&Co. pays to us the amounts we owe under your notes.

In addition to the factors discussed above, the value and quoted price of your notes at any time will reflect many factors and cannot be predicted. If GS&Co. makes a market in the notes, the price quoted by GS&Co. would reflect any changes in market conditions and other relevant factors, including any deterioration in our creditworthiness or perceived creditworthiness or the creditworthiness or perceived creditworthiness of The Goldman Sachs Group, Inc. These changes may adversely affect the value of your notes, including the price you may receive for your notes in any market making transaction. To the extent that GS&Co. makes a market in the notes, the quoted price will reflect the estimated value determined by reference to GS&Co.'s pricing models at that time, plus or minus its then current bid and ask spread for similar sized trades of structured notes (and subject to the declining excess amount described above).

Furthermore, if you sell your notes, you will likely be charged a commission for secondary market transactions, or the price will likely reflect a dealer discount. This commission or discount will further reduce the proceeds you would receive for your notes in a secondary market sale.

There is no assurance that GS&Co. or any other party will be willing to purchase your notes at any price and, in this regard, GS&Co. is not obligated to make a market in the notes. See “— Your Notes May Not Have an Active Trading Market” below.

The Notes Are Subject to the Credit Risk of the Issuer and the Guarantor

Although the coupons and return on the notes will be based on the performance of each index stock, the payment of any amount due on the notes is subject to the credit risk of GS Finance Corp., as issuer of the notes, and the credit risk of The Goldman Sachs Group, Inc., as guarantor of the notes. The notes are our unsecured obligations. Investors are dependent on our ability to pay all amounts due on the notes, and therefore investors are subject to our credit risk and to changes in the market’s view of our creditworthiness. Similarly, investors are dependent on the ability of The Goldman Sachs Group, Inc., as guarantor of the notes, to pay all amounts due on the notes, and therefore are also subject to its credit risk and to changes in the market’s view of its creditworthiness. See “Description of the Notes We May Offer — Information About Our Medium-Term Notes, Series F Program — How the Notes Rank Against Other Debt” on page S-5 of the accompanying prospectus supplement and “Description of Debt Securities We May Offer — Guarantee by The Goldman Sachs Group, Inc.” on page 67 of the accompanying prospectus.

You May Receive Only the Minimum Coupon Amount on Each Coupon Payment Date

If the closing price of any index stock on the related coupon observation date is *less than* its coupon trigger price, you will receive a coupon payment equal to the minimum coupon amount for each \$1,000 face amount of your notes on the applicable coupon payment date. If this occurs on every coupon observation date, the overall return you earn on your notes may be less than you would have earned by investing in a note that bears interest at the prevailing market rate.

Your Notes Are Subject to Automatic Redemption

We will automatically call and redeem all, but not part, of your notes on a call payment date if, as measured on any call observation date, the closing price of each index stock is *greater than* or *equal* to its initial index stock price. Therefore, the term for your notes may be reduced. You will not receive any additional coupon payments after the notes are automatically called and you may not be able to reinvest the proceeds from an investment in the notes at a comparable return for a similar level of risk in the event the notes are automatically called prior to maturity. For the avoidance of doubt, if your notes are automatically called, no discounts, commissions or fees described herein will be rebated or reduced.

The Coupon Does Not Reflect the Actual Performance of the Index Stocks from the Trade Date to Any Coupon Observation Date or from Coupon Observation Date to Coupon Observation Date

The coupon for each monthly coupon payment date is different from, and may be less than, a coupon determined based on the percentage difference of the closing prices of the index stocks between the trade date and any coupon observation date or between two coupon observation dates. Accordingly, the coupons on the notes may be less than the return you could earn on another instrument linked to the index stocks that pays coupons based on the performance of the index stocks from the trade date to any coupon observation date or from coupon observation date to coupon observation date.

The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors

When we refer to the market value of your notes, we mean the value that you could receive for your notes if you chose to sell them in the open market before the stated maturity date. A number of factors, many of which are beyond our control, will influence the market value of your notes, including:

- the market prices of the index stocks to which your notes are linked;
- the volatility – i.e., the frequency and magnitude of changes – in the market prices of the index stocks;
- the dividend rates of the index stocks;
- economic, financial, regulatory, political, military, public health and other events that affect stock markets generally and the market segments of which the index stocks are a part, and which may affect the market prices of the index stocks;
- interest rates and yield rates in the market;
- the time remaining until your notes mature; and

- our creditworthiness and the creditworthiness of The Goldman Sachs Group, Inc., whether actual or perceived, and including actual or anticipated upgrades or downgrades in our credit ratings or the credit ratings of The Goldman Sachs Group, Inc. or changes in other credit measures.

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.

These factors, and many other factors, will influence the price you will receive if you sell your notes before maturity, including the price you may receive for your notes in any market making transaction. If you sell your notes before maturity, you may receive less than the face amount of your notes.

You cannot predict the future performance of the index stocks based on their historical performance. The actual performance of the index stocks over the life of the offered notes, as well as the coupon payable on each coupon payment date, may bear little or no relation to the historical closing prices of the index stocks or to the hypothetical examples shown elsewhere in this prospectus supplement.

Your Notes May Not Have an Active Trading Market

Your notes will not be listed or displayed on any securities exchange or included in any interdealer market quotation system, and there may be little or no secondary market for your notes. Even if a secondary market for your notes develops, it may not provide significant liquidity and we expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your notes in any secondary market could be substantial.

If You Purchase Your Notes at a Premium to Face Amount, the Return on Your Investment Will Be Lower Than the Return on Notes Purchased at Face Amount and the Impact of Certain Key Terms of the Notes Will Be Negatively Affected

The amount we will pay you at maturity or the amount you will be paid on a call payment date will not be adjusted based on the issue price you pay for the notes. If you purchase notes at a price that differs from the face amount of the notes, then the return on your investment in such notes held to a call payment date or the stated maturity date will differ from, and may be substantially less than, the return on notes purchased at face amount. If you purchase your notes at a premium to face amount and hold them to a call payment date or the stated maturity date, the return on your investment in the notes will be lower than it would have been had you purchased the notes at face amount or a discount to face amount.

If the Market Prices of the Index Stocks Change, the Market Value of Your Notes May Not Change in the Same Manner

The price of your notes may move differently than the performance of the index stocks. Changes in the market prices of the index stocks may not result in a comparable change in the market value of your notes. Even if the closing price of each index stock is greater than or equal to its initial index stock price during some portion of the life of the notes, the market value of your notes may not reflect this. We discuss some of the reasons for this disparity under “— The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors” above.

We Will Not Hold Shares of the Index Stocks for Your Benefit

The indenture governing your note does not contain any restriction on our ability or the ability of any of our affiliates to sell, pledge or otherwise convey a share or shares of the index stocks acquired by us or them. Neither we nor our affiliates will pledge or otherwise hold shares of the index stocks for your benefit in order to enable you to exchange your note for shares under any circumstances. Consequently, in the event of our bankruptcy, insolvency or liquidation, any shares of the index stocks owned by us will be subject to the claims of our creditors generally and will not be available for your benefit specifically.

You Have No Shareholder Rights or Rights to Receive Any Shares of the Index Stocks

Investing in your notes will not make you a holder of any index stocks. Neither you nor any other holder or owner of your notes will have any rights with respect to the index stocks, including any voting rights, any rights to receive dividends or other distributions, any rights to make a claim against the index stocks, or any other rights of a holder of any shares of the index stocks. Your notes will be paid in cash and you will have no right to receive delivery of any shares of the index stocks.

In Some Circumstances, the Payment You Receive On the Notes May Be Based On the Securities of Another Company and Not the Issuer of an Index Stock

Following certain corporate events relating to an index stock where its issuer is not the surviving entity, the amount you receive at maturity may be based on the securities of a successor to such index stock issuer or any cash or any other assets distributed to holders of shares of such index stock in such corporate event. The occurrence of these corporate events and the consequent adjustments may materially and adversely affect the value of the notes. We describe the specific corporate events that can lead to these adjustments and the procedures for selecting distribution property (as described above) under “Terms and Conditions — Anti-dilution adjustments”.

Past Index Stock Performance is No Guide to Future Performance

The actual performance of the index stocks over the life of the notes, as well as the amount payable on any coupon payment date, may bear little relation to the historical closing prices of the index stocks or to the hypothetical examples set forth elsewhere in this prospectus supplement. We cannot predict the future performance of the index stocks.

As Calculation Agent, GS&Co. Will Have the Authority to Make Determinations that Could Affect the Value of Your Notes

As calculation agent for your notes, GS&Co. will have discretion in making certain determinations that affect your notes, including determining: the closing prices of the index stocks on any coupon observation date, which we will use to determine the coupon we will pay on any applicable coupon payment date; whether your notes will be automatically called; whether to postpone a coupon observation date because of a market disruption event or a non-trading day; when and how to make anti-dilution adjustments to the index stock prices; and the coupon observation dates and the coupon payment dates; the call observation dates and the call payment dates; and the stated maturity date. See “Terms and Conditions — Anti-dilution adjustments” above. The exercise of this discretion by GS&Co. could adversely affect the value of your notes and may present GS&Co. with a conflict of interest. We may change the calculation agent at any time without notice and GS&Co. may resign as calculation agent at any time upon 60 days' written notice to us.

The Calculation Agent Can Postpone a Coupon Observation Date If a Market Disruption Event or a Non-Trading Day Occurs or is Continuing

If the calculation agent determines that, on a date that would otherwise be a coupon observation date, a market disruption event has occurred or is continuing with respect to any index stock or that day is not a trading day with respect to any index stock, such coupon observation date will be postponed as provided under “Terms and Conditions — Coupon observation dates”. In no case, however, will the coupon observation date be postponed to a date later than the corresponding originally scheduled coupon payment date, or if the corresponding originally scheduled coupon payment date is not a business day, later than the first business day after the corresponding originally scheduled coupon payment date. Moreover, if a coupon observation date is postponed to the last possible day, but the market disruption event has not ceased by that day or that day is not a trading day, that day will nevertheless be the coupon observation date for the corresponding coupon payment date. In such a case, the calculation agent will determine the applicable closing prices of the index stocks for such coupon observation date based on the procedures described under “Terms and Conditions — Consequences of a market disruption event or a non-trading day” above.

There Is No Affiliation Between the Index Stock Issuers and Us

Goldman Sachs is not affiliated with the index stock issuers. As discussed above, however, we or our affiliates may currently or from time to time in the future engage in business with the index stock issuers. Neither we nor any of our affiliates have participated in the preparation of any publicly available information or made any “due diligence” investigation or inquiry with respect to the index stock issuers. You, as an investor in your note, should make your own investigation into the index stock issuers.

The index stock issuers are not involved in this offering of your notes in any way and do not have any obligation of any sort with respect to your notes. Thus, the index stock issuers do not have any obligation to take your interests into consideration for any reason, including in taking or not taking any corporate actions that might affect the value of your notes.

You Have Limited Anti-Dilution Protection

GS&Co., as calculation agent for your note, will adjust the index stock prices for stock splits, reverse stock splits, stock dividends, extraordinary dividends, issuances of transferable rights and warrants, reorganization events, and other events that affect the index stock issuers', or any distribution property issuers', capital structure, but only in the situations we describe in "Terms and Conditions — Anti-dilution adjustments" above. The calculation agent will not be required to make an adjustment for every corporate event that may affect an index stock. For example, the calculation agent will not adjust the index stock prices for events such as an offering of the index stocks for cash by the index stock issuers, a tender or exchange offer for the index stocks at a premium to their then-current market prices by the index stock issuers or a tender or exchange offer for less than all the outstanding shares of the index stocks by a third party. In addition, the calculation agent will not adjust the reference amount for regular cash dividends. Furthermore, the calculation agent will determine in its sole discretion whether to make adjustments with respect to corporate or other events as described under "Terms and Conditions — Anti-dilution adjustments — Reorganization events" above. Those events or other actions by the index stock issuers or a third party may nevertheless adversely affect the market price of one share of the index stocks and, therefore, adversely affect the market value of your notes. The index stock issuers or a third party could make an offering or a tender or exchange offer, or the index stock issuers could take any other action, that adversely affects the market prices of the index stocks and the market value of your note but does not result in an anti-dilution adjustment for your benefit.

We May Sell an Additional Aggregate Face Amount of the Notes at a Different Issue Price

At our sole option, we may decide to sell an additional aggregate face amount of the notes subsequent to the date of this prospectus supplement. The issue price of the notes in the subsequent sale may differ substantially (higher or lower) from the issue price you paid as provided on the cover of this prospectus supplement.

Risks Related to Conflicts of Interest

Hedging Activities by Goldman Sachs or Our Distributors May Negatively Impact Investors in the Notes and Cause Our Interests and Those of Our Clients and Counterparties to be Contrary to Those of Investors in the Notes

Goldman Sachs has hedged or expects to hedge our obligations under the notes by purchasing shares of the index stocks and listed or over-the-counter options, futures and/or other instruments linked to the index stocks. Goldman Sachs also expects to adjust the hedge by, among other things, purchasing or selling any of the foregoing, and perhaps other instruments linked to the index stocks, at any time and from time to time, and to unwind the hedge by selling any of the foregoing on or before the determination date for your notes. Alternatively, Goldman Sachs may hedge all or part of our obligations under the notes with unaffiliated distributors of the notes which we expect will undertake similar market activity. Goldman Sachs may also enter into, adjust and unwind hedging transactions relating to other notes whose returns are linked to changes in the prices of the index stocks.

In addition to entering into such transactions itself, or distributors entering into such transactions, Goldman Sachs may structure such transactions for its clients or counterparties, or otherwise advise or assist clients or counterparties in entering into such transactions. These activities may be undertaken to achieve a variety of objectives, including: permitting other purchasers of the notes or other securities to hedge their investment in whole or in part; facilitating transactions for other clients or counterparties that may have business objectives or investment strategies that are inconsistent with or contrary to those of investors in the notes; hedging the exposure of Goldman Sachs to the notes including any interest in the notes that it reacquires or retains as part of the offering process, through its market-making activities or otherwise; enabling Goldman Sachs to comply with its internal risk limits or otherwise manage firmwide, business unit or product risk; and/or enabling Goldman Sachs to take directional views as to relevant markets on behalf of itself or its clients or counterparties that are inconsistent with or contrary to the views and objectives of the investors in the notes.

Any of these hedging or other activities may adversely affect the prices of the index stocks — directly or indirectly— and therefore the market value of your notes and the amount we will pay on your notes. In addition, you should expect that these transactions will cause Goldman Sachs or its clients, counterparties or distributors to have economic interests and incentives that do not align with, and that may be directly contrary to, those of an investor in the notes. Neither Goldman Sachs nor any distributor will have any obligation to take, refrain from taking or cease taking any action with respect to these transactions based on the potential effect on an investor in the notes, and may receive substantial returns on hedging or other activities while the value of your notes declines. In addition, if the distributor from which you purchase notes is to conduct hedging activities in connection

with the notes, that distributor may otherwise profit in connection with such hedging activities and such profit, if any, will be in addition to the compensation that the distributor receives for the sale of the notes to you. You should be aware that the potential to earn fees in connection with hedging activities may create a further incentive for the distributor to sell the notes to you in addition to the compensation they would receive for the sale of the notes.

Goldman Sachs' Trading and Investment Activities for its Own Account or for its Clients, Could Negatively Impact Investors in the Notes

Goldman Sachs is a 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. As such, it acts as an investor, investment banker, research provider, investment manager, investment advisor, market maker, trader, prime broker and lender. In those and other capacities, Goldman Sachs purchases, sells or holds a broad array of investments, actively trades securities, derivatives, loans, commodities, currencies, credit default swaps, indices, baskets and other financial instruments and products for its own account or for the accounts of its customers, and will have other direct or indirect interests, in the global fixed income, currency, commodity, equity, bank loan and other markets. Any of Goldman Sachs' financial market activities may, individually or in the aggregate, have an adverse effect on the market for your notes, and you should expect that the interests of Goldman Sachs or its clients or counterparties will at times be adverse to those of investors in the notes.

Goldman Sachs regularly offers a wide array of securities, financial instruments and other products into the marketplace, including existing or new products that are similar to your notes, or similar or linked to the index stocks. Investors in the notes should expect that Goldman Sachs will offer securities, financial instruments, and other products that will compete with the notes for liquidity, research coverage or otherwise.

Goldman Sachs' Market-Making Activities Could Negatively Impact Investors in the Notes

Goldman Sachs actively makes markets in and trades financial instruments for its own account and for the accounts of customers. These financial instruments include debt and equity securities, currencies, commodities, bank loans, indices, baskets and other products. Goldman Sachs' activities include, among other things, executing large block trades and taking long and short positions directly and indirectly, through derivative instruments or otherwise. The securities and instruments in which Goldman Sachs takes positions, or expects to take positions, include securities and instruments of an index stock issuer, securities and instruments similar to or linked to the foregoing or the currencies in which they are denominated. Market making is an activity where Goldman Sachs buys and sells on behalf of customers, or for its own account, to satisfy the expected demand of customers. By its nature, market making involves facilitating transactions among market participants that have differing views of securities and instruments. As a result, you should expect that Goldman Sachs will take positions that are inconsistent with, or adverse to, the investment objectives of investors in the notes.

If Goldman Sachs becomes a holder of the index stocks in its capacity as a market-maker or otherwise, any actions that it takes in its capacity as securityholder, including voting or provision of consents, will not necessarily be aligned with, and may be inconsistent with, the interests of investors in the notes.

You Should Expect That Goldman Sachs Personnel Will Take Research Positions, or Otherwise Make Recommendations, Provide Investment Advice or Market Color or Encourage Trading Strategies That Might Negatively Impact Investors in the Notes

Goldman Sachs and its personnel, including its sales and trading, investment research and investment management personnel, regularly make investment recommendations, provide market color or trading ideas, or publish or express independent views in respect of a wide range of markets, issuers, securities and instruments. They regularly implement, or recommend to clients that they implement, various investment strategies relating to these markets, issuers, securities and instruments. These strategies include, for example, buying or selling credit protection against a default or other event involving an issuer or financial instrument. Any of these recommendations and views may be negative with respect to the index stocks or other securities or instruments similar to or linked to the foregoing or result in trading strategies that have a negative impact on the market for any such securities or instruments, particularly in illiquid markets. In addition, you should expect that personnel in the trading and investing businesses of Goldman Sachs will have or develop independent views of the index stocks, the relevant industry or other market trends, which may not be aligned with the views and objectives of investors in the notes.

Goldman Sachs Regularly Provides Services to, or Otherwise Has Business Relationships with, a Broad Client Base, Which May Include the Issuers of the Index Stocks or Other Entities That Are Involved in the Transaction

Goldman Sachs regularly provides financial advisory, investment advisory and transactional services to a substantial and diversified client base, and you should assume that Goldman Sachs will, at present or in the future, provide such services or otherwise engage in transactions with, among others, the issuers of the index stocks, or transact in securities or instruments or with parties that are directly or indirectly related to the foregoing. These services could include making loans to or equity investments in those companies, providing financial advisory or other investment banking services, or issuing research reports. You should expect that Goldman Sachs, in providing such services, engaging in such transactions, or acting for its own account, may take actions that have direct or indirect effects on the index stocks and that such actions could be adverse to the interests of investors in the notes. In addition, in connection with these activities, certain Goldman Sachs personnel may have access to confidential material non-public information about these parties that would not be disclosed to Goldman Sachs employees that were not working on such transactions as Goldman Sachs has established internal information barriers that are designed to preserve the confidentiality of non-public information. Therefore, any such confidential material non-public information would not be shared with Goldman Sachs employees involved in structuring, selling or making markets in the notes or with investors in the notes.

In this offering, as well as in all other circumstances in which Goldman Sachs receives any fees or other compensation in any form relating to services provided to or transactions with any other party, no accounting, offset or payment in respect of the notes will be required or made; Goldman Sachs will be entitled to retain all such fees and other amounts, and no fees or other compensation payable by any party or indirectly by holders of the notes will be reduced by reason of receipt by Goldman Sachs of any such other fees or other amounts.

The Offering of the Notes May Reduce an Existing Exposure of Goldman Sachs or Facilitate a Transaction or Position That Serves the Objectives of Goldman Sachs or Other Parties

A completed offering may reduce Goldman Sachs' existing exposure to the index stocks, securities and instruments similar to or linked to the foregoing or the currencies in which they are denominated, including exposure gained through hedging transactions in anticipation of this offering. An offering of notes will effectively transfer a portion of Goldman Sachs' exposure (and indirectly transfer the exposure of Goldman Sachs' hedging or other counterparties) to investors in the notes.

The terms of the offering (including the selection of the index stocks, and the establishment of other transaction terms) may have been selected in order to serve the investment or other objectives of Goldman Sachs or another client or counterparty of Goldman Sachs. In such a case, Goldman Sachs would typically receive the input of other parties that are involved in or otherwise have an interest in the offering, transactions hedged by the offering, or related transactions. The incentives of these other parties would normally differ from and in many cases be contrary to those of investors in the notes.

Other Investors in the Notes May Not Have the Same Interests as You

Other investors in the notes are not required to take into account the interests of any other investor in exercising remedies or voting or other rights in their capacity as securityholders or in making requests or recommendations to Goldman Sachs as to the establishment of other transaction terms. The interests of other investors may, in some circumstances, be adverse to your interests. For example, certain investors may take short positions (directly or indirectly through derivative transactions) on assets that are the same or similar to your notes, index stocks or other similar securities, which may adversely impact the market for or value of your notes.

Additional Risks Related to an ADS of Arm Holdings plc

An ADS of Arm Holdings plc Has a Very Limited Trading History

Your notes are linked, in part, to an ADS of Arm Holdings plc that has only recently commenced public trading and, therefore, has very limited historical performance. Because an ADS of Arm Holdings plc has no historical closing price prior to the completion of its initial public offering, limited historical index stock information will be available for you to consider in making an independent investigation of its index stock performance, which may make it difficult for you to make an informed decision with respect to the notes. Further, because an ADS of Arm Holdings plc has a very limited trading history, your investment in the notes may involve greater risks than an investment in notes linked to the securities of companies with a more established record of performance. For additional information about an ADS of Arm Holdings plc, see "The Index Stocks". No future performance of an

ADS of Arm Holdings plc be predicted based on the historical index stock performance information described herein.

An Investment in the Offered Notes is Subject to Risks Associated with Foreign Securities

Your notes are linked, in part, to an ADS representing an interest in a foreign equity security. Investments linked to the value of foreign equity securities involve particular risks. Any foreign securities market may be less liquid, more volatile and affected by global or domestic market developments in a different way than the U.S. securities markets or other foreign securities markets. Both government intervention in a foreign securities market, either directly or indirectly, and cross-shareholdings in foreign companies, may affect trading prices and volumes in that market.

The prices of securities in a foreign country are subject to political, economic, financial and social factors that are unique to such foreign country's geographical region. These factors include: recent changes, or the possibility of future changes, in the applicable foreign government's economic and fiscal policies; the possible implementation of, or changes in, currency exchange laws or other laws or restrictions applicable to foreign companies or investments in foreign equity securities; fluctuations, or the possibility of fluctuations, in currency exchange rates; and the possibility of outbreaks of hostility, political instability, natural disaster or adverse public health developments. For example, the United Kingdom ceased to be a member of the European Union on January 31, 2020 (an event commonly referred to as "Brexit"). The effects of Brexit are uncertain, and, among other things, Brexit has contributed, and may continue to contribute, to volatility in the prices of securities of companies located in Europe (or elsewhere) and currency exchange rates, including the valuation of the euro and British pound in particular. Any one of these factors, or the combination of more than one of these factors, could negatively affect such foreign securities market and the price of securities therein. Further, geographical regions may react to global factors in different ways, which may cause the prices of securities in a foreign securities market to fluctuate in a way that differs from those of securities in the U.S. securities market or other foreign securities markets. Foreign economies may also differ from the U.S. economy in important respects, including growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency, which may have a positive or negative effect on foreign securities prices.

The Offered Notes Are Subject to Foreign Currency Exchange Rate Risk

The ADSs are quoted and traded in U.S. dollars on a U.S. stock exchange, while the securities represented thereby are quoted and traded in the relevant foreign currency on another stock exchange. Therefore, fluctuations in the exchange rate between currencies in which the securities represented by the ADSs are quoted and traded and the U.S. dollar will likely affect the relative value of the ADSs. As a result, the market price of the ADSs trading on the U.S. stock exchange will likely be affected. These trading differences and currency exchange rates may affect the closing prices of the ADSs and, as a result, the market value of the notes.

Foreign currency exchange rates vary over time, and may vary considerably during the life of your notes. Changes in a particular exchange rate result from the interaction of many factors directly or indirectly affecting economic and political conditions. Of particular importance are:

- rates of inflation;
- interest rate levels;
- the balance of payments among countries;
- the extent of government surpluses or deficits in the relevant foreign country and the United States; and
- other financial, economic, military, public health and political factors.

All of these factors are, in turn, sensitive to the monetary, fiscal and trade policies pursued by the governments of the relevant foreign countries and the United States and other countries important to international trade and finance.

The price of the notes and any payment on the notes could also be adversely affected by delays in, or refusals to grant, any required governmental approval for conversions of a local currency and remittances abroad with respect to the ADSs or other de facto restrictions on the repatriation of U.S. dollars.

There are Important Differences Between the Rights of Holders of ADSs and the Rights of Holders of the Securities Represented By the ADSs

You should be aware that your return on the notes is linked, in part, to the price of the ADSs and not to the relevant securities that they represent. There are important differences between the rights of holders of ADSs and the rights of holders of the securities represented by the ADSs. Each ADS is a security evidenced by an American depositary receipt that typically represents one or a fraction of one represented security. The ADSs are issued pursuant to a deposit agreement, which sets forth the rights and responsibilities of the ADS depositary, the applicable index stock issuer, and holders of the ADSs, which may be different from the rights of holders of the applicable securities represented by the ADSs. For example, an index stock issuer may make distributions in respect of the securities represented by the ADSs that are not passed on to the holders of its ADSs. Any such differences between the rights of holders of the ADSs and the rights of holders of the securities represented by the ADSs may be significant and may materially and adversely affect the value of the ADSs and, as a result, the notes.

Government Regulatory Action, Including Legislative Acts and Executive Orders, Could Negatively Affect Your Investment in the Notes

Government regulatory action, including legislative acts and executive orders, could negatively affect your investment in the notes in a variety of ways, depending on the nature of such government regulatory action. For example, recently enacted legislation in the United States could lead to a prohibition on trading in the United States of the index stock if the Public Company Accounting Oversight Board is prevented from performing inspections relating to the index stock issuer by its jurisdiction of organization. Such legislation could have a material and negative effect on the index stock issuer, the index stock price and your return on the notes.

Further, recent executive orders issued by the U.S. Government prohibit U.S. persons from purchasing or selling publicly traded securities of certain companies that are determined to operate or have operated in the defense and related materiel sector or the surveillance technology sector of the economy of the People's Republic of China, or publicly traded securities that are derivative of, or that are designed to provide investment exposure to, those securities (including indexed notes). If the prohibitions in those executive orders (or prohibitions under other government regulatory action) become applicable to the offered notes due to determinations regarding the index stock, the value of the notes could be materially and negatively affected, and transactions in, or holdings of, the notes may become prohibited under United States law. Any such action could result in the loss of a significant portion or all of your investment in the notes, including if you attempt to divest the notes at a time when the value of the notes has declined.

Risks Related to Tax

Certain Considerations for Insurance Companies and Employee Benefit Plans

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

We Intend to Treat Your Notes as Debt Instruments Subject to Special Rules Governing Contingent Payment Debt Instruments for U.S. Federal Income Tax Purposes

We intend to treat your notes as debt instruments subject to special rules governing contingent payment debt instruments for U.S. federal income tax purposes. If you are a U.S. individual or taxable entity, you generally will be required to pay taxes on ordinary income from the notes over their term based on the comparable yield for the notes, subject to any positive or negative adjustments based on the actual payments on the notes. This comparable yield is determined solely to calculate the amount on which you will be taxed prior to maturity and is neither a prediction nor a guarantee of what the actual yield will be. In addition, any gain you may recognize on the sale, exchange, redemption or maturity of the notes will be taxed as ordinary interest income. If you are a secondary purchaser of the notes, the tax consequences to you may be different. Please see "Supplemental

Discussion of U.S. Federal Income Tax Consequences” below for a more detailed discussion. Please also consult your tax advisor concerning the U.S. federal income tax and any other applicable tax consequences to you of owning your notes in your particular circumstances.

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

Please see the discussion under “United States Taxation — Taxation of Debt Securities — Foreign Account Tax Compliance Act (FATCA) Withholding” in the accompanying prospectus for a description of the applicability of FATCA to payments made on your notes.

USE OF PROCEEDS

We intend to lend the net proceeds from the sale of the offered notes to The Goldman Sachs Group, Inc. or its affiliates. The Goldman Sachs Group, Inc. expects to use the proceeds from such loans for the purposes we describe in the accompanying prospectus under "Use of Proceeds". We or our affiliates may also use those proceeds in transactions intended to hedge our obligations under the offered notes as described below.

HEDGING

In anticipation of the sale of the offered notes, we and/or our affiliates have entered into or expect to enter into hedging transactions involving purchases of the index stocks and listed or over-the-counter options, futures or other instruments linked to the index stocks on or before the trade date. In addition, from time to time, we and/or our affiliates expect to enter into additional hedging transactions and to unwind those we have entered into, in connection with the offered notes and perhaps in connection with other notes we issue, some of which may have returns linked to index stocks. Consequently, with regard to your notes, from time to time, we and/or our affiliates:

- expect to acquire, or dispose of positions in listed or over-the-counter options, futures or other instruments linked to the index stocks,
- may take or dispose of positions in the securities of the index stock issuer itself,
- 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 the New York Stock Exchange or other components of the U.S. equity market, and/ or
- may take short positions in the index stock or other securities of the kind described above — i.e., we and/or our affiliates may sell securities of the kind that we do not own or that we borrow for delivery to purchaser.

We and/or our affiliates may also acquire a long or short position in securities similar to your 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 expect to close out hedge positions relating to the offered notes and perhaps relating to other notes with returns linked to the index stocks. We expect these steps to involve sales of instruments linked to the index stocks on or shortly before the determination date. These steps may also involve sales and/or purchases of the index stocks, or listed or over-the-counter options, futures or other instruments linked to the index stock or indices designed to track the performance of the New York Stock Exchange or other components of the U.S. equity market.

The hedging activity discussed above may adversely affect the market value of your notes from time to time and the amount we will pay on your notes at maturity. See "Additional Risk Factors Specific to Your Notes" above for a discussion of these adverse effects.

THE INDEX STOCKS

Where Information About the Index Stock Issuers Can Be Obtained

The index stocks are registered under the Securities Exchange Act of 1934. Companies with securities registered under the Exchange Act are required to file financial and other information specified by the U.S. Securities and Exchange Commission (“SEC”) periodically. Information filed by the index stock issuers with the SEC electronically can be reviewed through a web site maintained by the SEC. The address of the SEC’s web site is sec.gov.

Information about the index stock issuers may also be obtained from other sources such as press releases, newspaper articles and other publicly available documents.

We do not make any representation or warranty as to the accuracy or completeness of any materials referred to above, including any filings made by the index stock issuers with the SEC.

We Obtained the Information About the Index Stock Issuers From The Index Stock Issuers’ Public Filings

This prospectus supplement relates only to your note and does not relate to the index stocks or other securities of the index stock issuers. We have derived all information about the index stock issuers in this prospectus supplement from the publicly available information referred to in the preceding subsection. We have not participated in the preparation of any of those documents or made any “due diligence” investigation or inquiry with respect to the index stock issuers in connection with the offering of your note. Furthermore, we do not know whether all events occurring before the date of this prospectus supplement — including events that would affect the accuracy or completeness of the publicly available documents referred to above and the trading price of shares of the index stocks — have been publicly disclosed. Subsequent disclosure of any events of this kind or the disclosure of or failure to disclose material future events concerning the index stock issuers could affect the value you will receive at maturity and, therefore, the market value of your note.

Neither we nor any of our affiliates make any representation to you as to the performance of the index stocks.

We or any of our affiliates may currently or from time to time engage in business with the index stock issuers, including making loans to or equity investments in the index stock issuers or providing advisory services to the index stock issuers, including merger and acquisition advisory services. In the course of that business, we or any of our affiliates may acquire non-public information about the index stock issuers and, in addition, one or more of our affiliates may publish research reports about the index stock issuers. As an investor in a note, you should undertake such independent investigation of the index stock issuers as in your judgment is appropriate to make an informed decision with respect to an investment in a note.

Historical Closing Prices of the Index Stocks

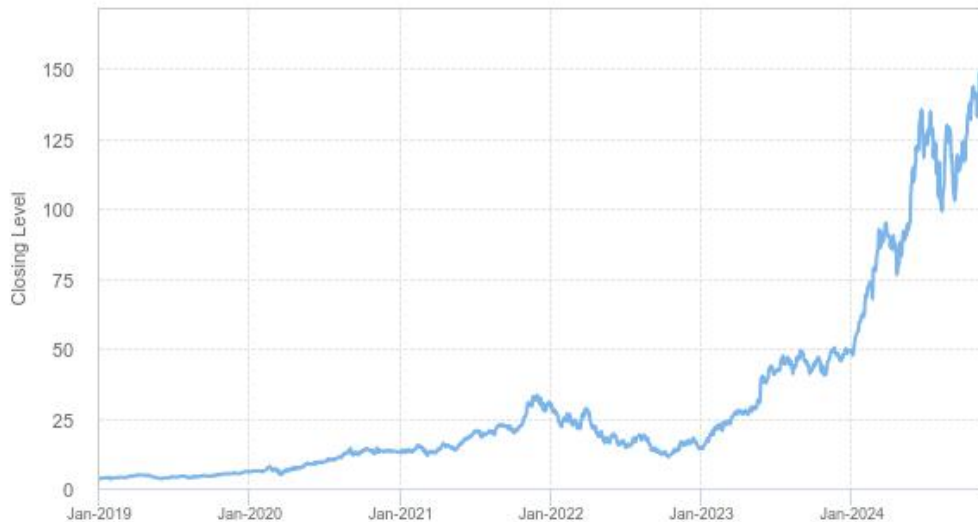
The closing prices of the index stocks have fluctuated in the past and may, in the future, experience significant fluctuations. **In particular, the index stocks have recently experienced extreme and unusual volatility.** Any historical upward or downward trend in the closing prices of any index stocks during the period shown below is not an indication that such index stocks are more or less likely to increase or decrease at any time during the life of your notes.

You should not take the historical closing prices of an index stock as an indication of the future performance of an index stock, including because of the recent volatility described above. We cannot give you any assurance that the future performance of any index stock will result in you receiving any coupon payments. Neither we nor any of our affiliates make any representation to you as to the performance of the index stocks. Before investing in the offered notes, you should consult publicly available information to determine the relevant prices of the index stocks between the date of this prospectus supplement and the date of your purchase of the notes **and, given the recent volatility described above, you should pay particular attention to recent prices of the index stocks.** The actual performance of an index stock over the life of the offered notes may bear little relation to the historical prices shown below.

The graphs below, except where otherwise indicated, show the daily historical closing prices of each index stock from January 1, 2019 through November 18, 2024, adjusted for corporate events, if applicable. As a result, the following graphs do not reflect the global financial crisis which began in 2008, which had a materially negative impact on the price of most equity securities. We obtained the closing prices in the graphs below from Bloomberg Financial Services, without independent verification.

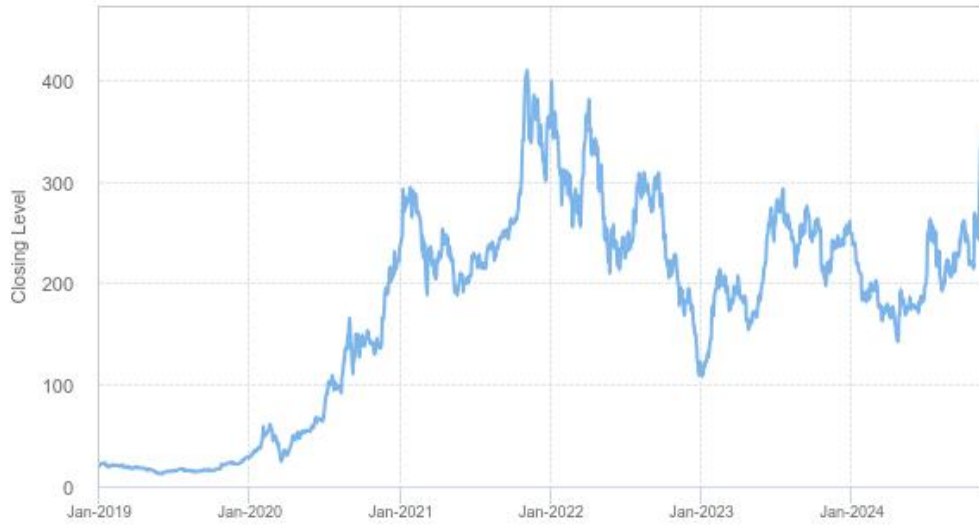
According to publicly available information, NVIDIA Corporation is a full-stack computing infrastructure company with data-center-scale offerings. Information filed with the SEC by the index stock issuer under the Exchange Act can be located by referencing its SEC file number 000-23985. The daily historical closing prices for NVIDIA Corporation in the graph below have been adjusted for a 4-for-1 stock split that became effective before the market open on July 20, 2021 and a 10-for-1 stock split that became effective before the market open on June 10, 2024.

Historical Performance of NVIDIA Corporation



According to publicly available information, Tesla, Inc. designs, develops, manufactures, sells and leases fully electric vehicles and energy generation and storage systems. Information filed with the SEC by the index stock issuer under the Exchange Act can be located by referencing its SEC file number 001-34756. The daily historical closing prices for Tesla, Inc. in the graph below have been adjusted for a 5-for-1 stock split that became effective before the market open on August 31, 2020 and a 3-for-1 stock split that became effective before the market open on August 25, 2022.

Historical Performance of Tesla, Inc.



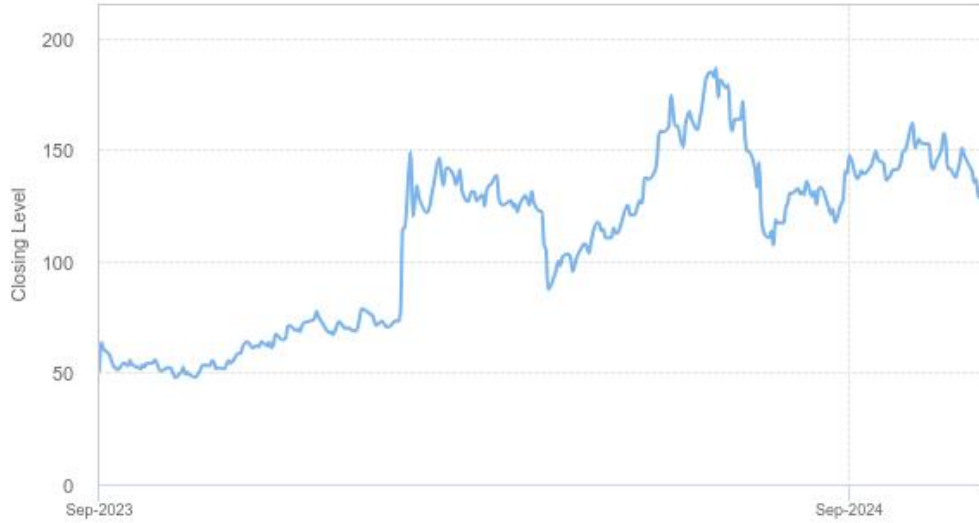
According to publicly available information, Vertiv Holdings Co designs, manufactures and services digital infrastructure for data centers, communication networks, and commercial and industrial environments. Information filed with the SEC by the index stock issuer under the Exchange Act can be located by referencing its SEC file number 001-38518.

Historical Performance of Vertiv Holdings Co – Class A



According to publicly available information, Arm Holdings plc provides licensing, marketing, research and development of microprocessors, systems IP, graphics processing units, physical IP and associated systems IP, software, tools and other related services. Information filed with the SEC by the index stock issuer under the Exchange Act can be located by referencing its SEC file number 001-41800. Arm Holdings plc has been listed on the Nasdaq Global Select Market since the completion of its initial public offering on September 14, 2023. The graph below shows the daily historical prices of Arm Holdings plc from the completion of its initial public offering on September 14, 2023 through November 4, 2024.

Historical Performance of Arm Holdings plc



SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES

The following section supplements the discussion of U.S. federal income taxation in the accompanying prospectus.

The following section is the opinion of Sidley Austin LLP, counsel to GS Finance Corp. and The Goldman Sachs Group, Inc.

This section does not apply to you if you are a member of a class of holders subject to special rules, such as:

- a dealer in securities or currencies;
- a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings;
- a bank;
- a life insurance company;
- a regulated investment company;
- an accrual method taxpayer subject to special tax accounting rules as a result of its use of financial statements;
- a tax exempt organization;
- a partnership;
- a person that owns a note as a hedge or that is hedged against interest rate risks;
- a person that owns a note as part of a straddle or conversion transaction for tax purposes; or
- a United States holder (as defined below) whose functional currency for tax purposes is not the U.S. dollar.

This section is based on the U.S. Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations under the Internal Revenue Code, published rulings and court decisions, all as currently in effect. These laws are subject to change, possibly on a retroactive basis.

You should consult your tax advisor concerning the U.S. federal income tax and other tax consequences of your investment in the notes, including the application of state, local or other tax laws and the possible effects of changes in federal or other tax laws.

United States Holders

This section applies to you only if you are a United States holder that holds your notes as a capital asset for tax purposes. You are a United States holder if you are a beneficial owner of a note and you are:

- a citizen or resident of the United States;
- a domestic corporation;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust.

If you are not a United States holder, this section does not apply to you and you should refer to "— Non-United States Holders" below.

We intend to treat your notes as debt instruments subject to special rules governing contingent payment debt instruments for U.S. federal income tax purposes. Under those rules, the amount of interest you are required to take into account for each accrual period will be determined by constructing a projected payment schedule for

your notes and applying rules similar to those for accruing original issue discount on a hypothetical noncontingent debt instrument with that projected payment schedule. This method is applied by first determining the yield at which we would issue a noncontingent fixed rate debt instrument with terms and conditions similar to your notes (the “comparable yield”) and then determining as of the issue date a payment schedule that would produce the comparable yield. Under these rules, you will only accrue interest based on the comparable yield. You will not have to separately include the amount of interest that you receive, except to the extent of any positive or negative adjustments discussed below.

It is not entirely clear how, under the rules governing contingent payment debt instruments, the maturity date for debt instruments (such as your notes) that provide for the possibility of early redemption should be determined for purposes of computing the comparable yield and projected payment schedule. It would be reasonable, however, to compute the comparable yield and projected payment schedule for your notes (and we intend to make the computation in such a manner) based on the assumption that your notes will remain outstanding until the stated maturity date.

We have determined that the comparable yield for the notes is equal to % per annum, compounded monthly. We have determined that the projected payment schedule consists of estimates of the monthly coupon payments (as set forth in the table below) and a projected payment at maturity (excluding the final monthly coupon payment) of \$ based on an investment of \$1,000.

Based on this comparable yield, if you are an initial holder that holds a note until maturity and you pay your taxes on a calendar year basis, we have determined that you would be required to report the following amounts as ordinary income, not taking into account any positive or negative adjustments you may be required to take into account based on the actual payments on the notes, from the note each year:

Accrual Period	Interest Deemed to Accrue During Accrual Period (per \$1,000 note)	Total Interest Deemed to Have Accrued from Original Issue Date (per \$1,000 note) as of End of Accrual Period
through December 31, 2025		
January 1, 2025 through December 31, 2025		
January 1, 2026 through December 31, 2026		
January 1, 2027 through December 31, 2027		
January 1, 2028 through December 31, 2028		
January 1, 2029 through		

In addition, we have determined the projected payments for your notes as follows:

Taxable Year	Payment in January	Payment in February	Payment in March	Payment in April	Payment in May	Payment in June	Payment in July	Payment in August	Payment in September	Payment in October	Payment in November	Payment in December
2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$
2025	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2026	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2027	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2028	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2029	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	N/A	\$

You are required to use the comparable yield and projected payment schedule that we compute in determining your interest accruals in respect of your notes, unless you timely disclose and justify on your U.S. federal income tax return the use of a different comparable yield and projected payment schedule.

The comparable yield and projected payment schedule are not provided to you for any purpose other than the determination of your interest accruals in respect of your notes, and we make no representation regarding the amount of contingent payments with respect to your notes.

If, during any taxable year, the actual payments with respect to the notes exceed the projected payments for that taxable year, you will incur a "net positive adjustment" under the contingent payment debt regulations equal to the amount of such excess. You will treat a net positive adjustment as additional interest income in that taxable year.

If, during any taxable year, the actual payments with respect to the notes are less than the amount of projected payments for that taxable year, you will incur a "net negative adjustment" under the contingent payment debt regulations equal to the amount of such deficit. This net negative adjustment will (a) reduce your interest income on the notes for that taxable year, and (b) to the extent of any excess after the application of (a), give rise to an ordinary loss to the extent of your interest income on the notes during prior taxable years, reduced to the extent such interest was offset by prior net negative adjustments. Any net negative adjustment in excess of the amounts described in (a) and (b) will be carried forward as a negative adjustment to offset future interest income with respect to the notes or to reduce the amount realized on a sale, exchange, redemption or maturity of the notes. A net negative adjustment is not subject to the two percent floor limitation on miscellaneous itemized deductions.

Furthermore, it is possible that any Form 1099-OID you receive in respect of the notes may not take net negative or positive adjustments into account and therefore may overstate or understate your interest inclusions. You should consult your tax advisor as to whether and how adjustments should be made to the amounts reported on any Form 1099-OID.

If you purchase your notes at a price other than their adjusted issue price determined for tax purposes, you must determine the extent to which the difference between the price you paid for your notes and their adjusted issue price is attributable to a change in expectations as to the projected payment schedule, a change in interest rates, or both, and reasonably allocate the difference accordingly. The adjusted issue price of your notes will equal your notes' original issue price plus any interest deemed to be accrued on your notes (under the rules governing contingent payment debt instruments) as of the time you purchase your notes, decreased by the projected amount of any contingent payments previously made with respect to the notes. The original issue price of your notes will be the first price at which a substantial amount of the notes is sold to persons other than bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers. Therefore, you may be required to make the adjustments described above even if you purchase your notes in the initial offering if you purchase your notes at a price other than the issue price.

If the adjusted issue price of your notes is greater than the price you paid for your notes, you must make positive adjustments increasing (i) the amount of interest that you would otherwise accrue and include in income each year, and (ii) the amount of ordinary income (or decreasing the amount of ordinary loss) recognized upon sale, exchange, redemption or maturity by the amounts allocated under the previous paragraph to each of interest and the projected payment schedule; if the adjusted issue price of your notes is less than the price you paid for your notes, you must make negative adjustments, decreasing (i) the amount of interest that you must include in income each year, and (ii) the amount of ordinary income (or increasing the amount of ordinary loss) recognized upon sale, exchange, redemption or maturity by the amounts allocated under the previous paragraph to each of interest and the projected payment schedule. Adjustments allocated to the interest amount are not made until the date the daily portion of interest accrues.

Because any Form 1099-OID that you receive will not reflect the effects of positive or negative adjustments resulting from your purchase of notes at a price other than the adjusted issue price determined for tax purposes, you are urged to consult with your tax advisor as to whether and how adjustments should be made to the amounts reported on any Form 1099-OID.

You will recognize gain or loss upon the sale, exchange, redemption or maturity of your notes in an amount equal to the difference, if any, between the cash amount you receive at such time and your adjusted basis in your notes. In general, your adjusted basis in your notes will equal the amount you paid for your notes, increased by the amount of interest you previously accrued with respect to your notes (in accordance with the comparable yield and the projected payment schedule for your notes), decreased by the projected amount of any contingent payments previously made to you with respect to your notes and increased or decreased by the amount of any positive or negative adjustment, respectively, that you are required to make if you purchase your notes at a price other than the adjusted issue price determined for tax purposes.

Any gain you recognize upon the sale, exchange, redemption or maturity of your notes will be ordinary interest income. Any loss you recognize at such time will be ordinary loss to the extent of interest you included as income in the current or previous taxable years in respect of your notes, and, thereafter, capital loss. If you are a noncorporate holder, you would generally be able to use such ordinary loss to offset your income only in the taxable year in which you recognize the ordinary loss and would generally not be able to carry such ordinary loss forward or back to offset income in other taxable years.

Alternative Treatments. There is no judicial or administrative authority discussing how your notes should be treated for U.S. federal income tax purposes. Therefore, the Internal Revenue Service might assert that a treatment other than that described above is more appropriate. It is possible that your notes could be treated in the manner described above, except that any gain or loss that you recognize at maturity would be treated as capital gain or loss. You should consult your tax advisor as to the tax consequences of such characterization and any possible alternative characterizations of your notes for U.S. federal income tax purposes.

It is possible that the Internal Revenue Service could seek to characterize your notes in a manner that results in tax consequences to you that are different from those described above. You should consult your tax advisor as to the tax consequences of any possible alternative characterizations of your notes for U.S. federal income tax purposes.

Non-United States Holders

If you are a non-United States holder, please see the discussion under “United States Taxation — Taxation of Debt Securities — Non-United States Holders” in the accompanying prospectus for a description of the tax consequences relevant to you. You are a non-United States holder if you are the beneficial owner of the notes and are, for U.S. federal income tax purposes:

- a nonresident alien individual;
- a foreign corporation; or
- an estate or trust that in either case is not subject to U.S. federal income tax on a net income basis on income or gain from the notes.

In addition, the Treasury Department has issued regulations under which amounts paid or deemed paid on certain financial instruments (“871(m) financial instruments”) that are treated as attributable to U.S.-source dividends could be treated, in whole or in part depending on the circumstances, as a “dividend equivalent” payment that is subject to tax at a rate of 30% (or a lower rate under an applicable treaty), which in the case of any coupon payments and amounts you receive upon the sale, exchange, redemption or maturity of your notes, could be collected via withholding. If these regulations were to apply to the notes, we may be required to withhold such taxes if any U.S.-source dividends are paid on the index stocks during the term of the notes. We could also require you to make certifications (e.g., an applicable Internal Revenue Service Form W-8) prior to any coupon payment or the maturity of the notes in order to avoid or minimize withholding obligations, and we could withhold accordingly (subject to your potential right to claim a refund from the Internal Revenue Service) if such certifications were not received or were not satisfactory. If withholding was required, we would not be required to pay any additional amounts with respect to amounts so withheld. These regulations generally will apply to 871(m) financial instruments (or a combination of financial instruments treated as having been entered into in connection with each other) issued (or significantly modified and treated as retired and reissued) on or after January 1, 2027, but will also apply to certain 871(m) financial instruments (or a combination of financial instruments treated as having been entered into in connection with each other) that have a delta (as defined in the applicable Treasury regulations) of one and are issued (or significantly modified and treated as retired and reissued) on or after

January 1, 2017. In addition, these regulations will not apply to financial instruments that reference a “qualified index” (as defined in the regulations). We have determined that, as of the issue date of your notes, your notes will not be subject to withholding under these rules. In certain limited circumstances, however, you should be aware that it is possible for non-United States holders to be liable for tax under these rules with respect to a combination of transactions treated as having been entered into in connection with each other even when no withholding is required. You should consult your tax advisor concerning these regulations, subsequent official guidance and regarding any other possible alternative characterizations of your notes for U.S. federal income tax purposes.

Foreign Account Tax Compliance Act (FATCA) Withholding

Pursuant to Treasury regulations, Foreign Account Tax Compliance Act (FATCA) withholding (as described in “United States Taxation—Taxation of Debt Securities—Foreign Account Tax Compliance Act (FATCA) Withholding” in the accompanying prospectus) will generally apply to obligations that are issued on or after July 1, 2014; therefore, the notes will generally be subject to the FATCA withholding rules.

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 U.S. Internal Revenue Code of 1986, as amended (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) (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 "plan assets" under ERISA or assets of certain investment vehicles in which the Plan invests. Each of The Goldman Sachs Group, Inc. and certain of its affiliates 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 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.

SUPPLEMENTAL PLAN OF DISTRIBUTION

GS Finance Corp. will sell to GS&Co., and GS&Co. will purchase from GS Finance Corp., the aggregate face amount of the offered notes specified on the front cover of this prospectus supplement. GS&Co. proposes initially to offer the notes to the public at the original issue price set forth on the cover page of this prospectus supplement, and to certain securities dealers at such price less a concession not in excess of % of the face amount. GS&Co. may pay a referral fee of % from the concession to another dealer in connection with its marketing efforts related to the offered notes. The original issue price for notes purchased by certain retirement accounts and certain fee-based advisory accounts will be % of the face amount of the notes, which will reduce the underwriting discount specified on the cover of this prospectus supplement with respect to such notes to %.

In the future, GS&Co. or other affiliates of GS Finance Corp. may repurchase and resell the offered notes in market-making transactions, with resales being made at prices related to prevailing market prices at the time of resale or at negotiated prices. GS Finance Corp. estimates that its share of the total offering expenses, excluding underwriting discounts and commissions, will be approximately \$. For more information about the plan of distribution and possible market-making activities, see "Plan of Distribution" in the accompanying prospectus.

We have been advised that GS&Co. will also pay a fee to iCapital Markets LLC, a broker-dealer in which an affiliate of GS Finance Corp. holds an indirect minority equity interest, for services it is providing in connection with this offering.

We expect to deliver the notes against payment therefor in New York, New York on November 29, 2024. Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in one business day, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes on any date prior to one business day before delivery will be required to specify alternative settlement arrangements to prevent a failed settlement.

We have been advised by GS&Co. that it intends to make a market in the notes. However, neither GS&Co. nor any of our other affiliates 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.

The notes may not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). Consequently no key information document required by Regulation (EU) No 1286/2014 (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. 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 (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 where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or
 - (iii) not a qualified investor as defined in Regulation (EU) 2017/1129; 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.

The notes may not be offered, sold or otherwise made available to any retail investor in the United Kingdom. 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 United Kingdom has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the United Kingdom may be unlawful under the UK PRIIPs Regulation. 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 European Union (Withdrawal) Act 2018 (“EUWA”); or
 - (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000, as amended (the “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;
 - (iii) or not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 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.

Any invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) in connection with the issue or sale of the notes may only be communicated or caused to be communicated in circumstances in which Section 21(1) of the FSMA does not apply to GS Finance Corp. or The Goldman Sachs Group, Inc.

All applicable provisions of the FSMA must be complied with in respect to anything done by any person in relation to the notes in, from or otherwise involving the United Kingdom.

The notes may not be offered or sold in Hong Kong by means of any document other than (i) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) and any rules made thereunder, or (ii) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) or which do not constitute an offer to the public within the meaning of that Ordinance; and 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) which 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 securities laws of Hong Kong) other than with respect to the notes which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance and any rules made thereunder.

This prospectus supplement, along with the accompanying prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement, along with the accompanying prospectus supplement and the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes may not be circulated or distributed, nor may the notes 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 Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (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) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of 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, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for six months after that corporation has acquired the notes under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation’s securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore (“Regulation 32”).

Where the notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferable for six months after that trust has acquired the notes

under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

The notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended), or the FIEA. The notes may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

The notes are not offered, sold or advertised, directly or indirectly, in, into or from Switzerland on the basis of a public offering and will not be listed on the SIX Swiss Exchange or any other offering or regulated trading facility in Switzerland. Accordingly, neither this prospectus supplement nor any accompanying prospectus supplement, prospectus or other marketing material constitute a prospectus as defined in article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus as defined in article 32 of the Listing Rules of the SIX Swiss Exchange or any other regulated trading facility in Switzerland. Any resales of the notes by the underwriters thereof may only be undertaken on a private basis to selected individual investors in compliance with Swiss law. This prospectus supplement and accompanying prospectus and prospectus supplement may not be copied, reproduced, distributed or passed on to others or otherwise made available in Switzerland without our prior written consent. By accepting this prospectus supplement and accompanying prospectus and prospectus supplement or by subscribing to the notes, investors are deemed to have acknowledged and agreed to abide by these restrictions. Investors are advised to consult with their financial, legal or tax advisers before investing in the notes.

The notes will not be listed on any securities exchange or interdealer quotation system.

Conflicts of Interest

GS&Co. is an affiliate of GS Finance Corp. and The Goldman Sachs Group, Inc. and, as such, will have a “conflict of interest” in this offering of notes within the meaning of Financial Industry Regulatory Authority, Inc. (FINRA) Rule 5121. Consequently, this offering of notes will be conducted in compliance with the provisions of FINRA Rule 5121. GS&Co. will not be permitted to sell notes in this offering to an account over which it exercises discretionary authority without the prior specific written approval of the account holder.

We have not authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this prospectus supplement, the accompanying prospectus supplement or the accompanying prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus supplement, the accompanying prospectus supplement and the accompanying prospectus is an offer to sell only the notes offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement, the accompanying prospectus supplement and the accompanying prospectus is current only as of the respective dates of such documents.

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GS Finance Corp.

Autocallable Variable Coupon Equity-Linked Notes due

guaranteed by

The Goldman Sachs Group, Inc.



Goldman Sachs & Co. LLC