

GOLDMAN SACHS GROUP INC

FORM 424B2

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

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Telephone	2129021000
CIK	0000886982
Symbol	GS
SIC Code	6211 - Security Brokers, Dealers and Flotation Companies
Industry	Investment Banking & Brokerage Services
Sector	Financials
Fiscal Year	12/31



GS Finance Corp.

\$358,000

Absolute Return Trigger S&P 500® Index-Linked Notes due 2026
guaranteed by

The Goldman Sachs Group, Inc.

The notes do not bear interest. The amount that you will be paid on your notes on the stated maturity date (February 5, 2026) is based on the performance of the S&P 500® Index as measured from and including the trade date (January 31, 2023) to and including the determination date (February 2, 2026), unless a barrier event has occurred.

A barrier event will occur if, on any day during the measurement period, which is the period from but excluding the trade date to and including the determination date, the closing level of the index increases or decreases by more than the maximum return of 30% from the initial index level. The initial index level is 4,076.60.

If a barrier event has occurred at any time during the measurement period, the return on your notes will be positive and at maturity you will receive \$1,125 for each \$1,000 face amount of your notes (representing a return of 12.5%), regardless of the final index level (which is the closing index level on the determination date). **A barrier event may occur at any point during the measurement period; however, you will not receive \$1,125 for each \$1,000 face amount of your notes until maturity and you will receive such amount regardless of the final index level.**

If a barrier event has not occurred, the return on your notes will be zero or positive and will equal the absolute value of the index return which is the increase or decrease in the final index level from the initial index level. For example, if the index return is either -10% or +10%, your return will be +10%.

At maturity, for each \$1,000 face amount, (a) if a barrier event has occurred you will receive \$1,125 and (b) if a barrier event has not occurred, you will receive (i) \$1,000 *plus* (ii) \$1,000 *times* the absolute value of the index return (not less than \$1,000 and not more than \$1,300). **If the increase in the final index level from the initial index level exceeds the maximum return, you will only receive \$1,125.**

A purchaser of these notes in the secondary market should determine if a barrier event has already occurred. The occurrence of a barrier event could significantly affect both the secondary market trading price of these notes and the amount that a holder of the notes will receive at maturity. See page PS-4.

At maturity, for each \$1,000 face amount of your notes you will receive an amount in cash equal to:

- if a barrier event has not occurred, the *sum* of (i) \$1,000 *plus* (ii) the *product* of \$1,000 *times* the absolute value of the index return, which sum will be no less than \$1,000 and no more than \$1,300; or
- if a barrier event has occurred, \$1,125.

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 PS-11.

The estimated value of your notes at the time the terms of your notes are set on the trade date is equal to approximately \$974 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: February 3, 2023

Underwriting discount: 1% of the face amount*

*See "Supplemental Plan of Distribution; Conflicts of Interest" on page PS-21 for additional information regarding the fees comprising the underwriting discount.

Original issue price: 100% of the face amount

Net proceeds to the issuer: 99% of the face amount

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

Pricing Supplement No. 8,631 dated January 31, 2023.

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 pricing 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 equal to approximately \$974 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 \$26 per \$1,000 face amount).

Prior to May 31, 2023, 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 May 30, 2023). On and after May 31, 2023, 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 pricing supplement and the accompanying documents listed below. This pricing 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:

- General terms supplement no. 2,913 dated June 17, 2021
- Underlier supplement no. 31 dated January 24, 2023
- Prospectus supplement dated March 22, 2021
- Prospectus dated March 22, 2021

The information in this pricing 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 pricing supplement as the “offered notes” or the “notes”. Each of the offered notes has the terms described below. Please note that in this pricing 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.

INVESTMENT THESIS

For investors who:

- believe that a barrier event (described below) will not occur and that the index return or absolute value of the index return will be greater than 12.5% but not more than 30%;
- want limited exposure to (i) the index return if the final index level is *greater than* or *equal* to the initial index level or (ii) the absolute value of the index return if the final index level is *less than* the initial index level, in each case assuming a barrier event does not occur;
- are willing to forgo exposure to such index return or absolute value of the index return if a barrier event occurs and in that case are willing to receive a contingent return of 12.5% instead; and
- are willing to accept that, if a barrier event has not occurred, the return on the notes will be limited to between 0%, on the lower end of the range, and 30%, on the higher end of the range, and, if a barrier event has occurred, the return on the notes will be limited to 12.5%.

A barrier event will occur if, on any day during the measurement period, the closing level of index (i) declines below the lower barrier of 70% of the initial index level or (ii) increases above the upper barrier of 130% of the initial index level.

CONSIDERATIONS FOR SECONDARY MARKET PURCHASERS

A purchaser of these notes in the secondary market should determine if a barrier event has already occurred. The occurrence of a barrier event could affect both the secondary market trading price of these notes after a secondary market purchase and the amount a secondary market purchaser will receive at maturity. In order to determine if a barrier event has occurred, you should determine if, on any date from the day after the trade date to the date of your purchase, the closing level of the index was less than 70% of the initial index level or the closing level of the index was greater than 130% of the initial index level. Certain financial websites make index levels publicly available, which can be helpful when determining whether a barrier event may have occurred. If you would like assistance in determining whether a barrier event has occurred, please call GS&Co. at (212) 902-0300.

TERMS AND CONDITIONS

CUSIP / ISIN: 40057PCP5 / US40057PCP53

Company (Issuer): GS Finance Corp.

Guarantor: The Goldman Sachs Group, Inc.

Underlier: the S&P 500® Index (current Bloomberg symbol: "SPX Index"), or any successor underlier, as it may be modified, replaced or adjusted from time to time as provided herein

Face amount: \$358,000 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: On the stated maturity date, the company will pay, for each \$1,000 of the outstanding face amount, an amount in cash equal to the cash settlement amount.

Cash settlement amount:

- if a barrier event has not occurred, the *sum* of (i) \$1,000 *plus* (ii) the *product* of \$1,000 *times* the absolute underlier return; or
- if a barrier event has occurred, the *sum* of (i) \$1,000 *plus* (ii) the *product* of \$1,000 *times* the contingent return

Initial underlier level: 4,076.60

Final underlier level: the closing level of the underlier on the determination date, subject to adjustment as provided in "— Consequences of a market disruption event or non-trading day" and "— Discontinuance or modification of the underlier" below

Underlier return: the *quotient* of (i) the final underlier level *minus* the initial underlier level *divided* by (ii) the initial underlier level, expressed as a percentage

Absolute underlier return: the absolute value of the underlier return, expressed as a percentage (e.g., a -10% or +10% underlier return will equal a +10% absolute underlier return)

Contingent Return: 12.5%

Measurement period: the period from but excluding the trade date to and including the determination date, *excluding* any date or dates on which the calculation agent determines that a market disruption event occurs or is continuing or that the calculation agent determines is not a trading day. Notwithstanding the immediately preceding sentence, if the calculation agent determines that a market disruption event occurs or is continuing on the last day of the measurement period (i.e., the determination date) or that day is not otherwise a trading day, the determination date, and therefore the last day for the measurement period, will be postponed as described under "— Determination date" below.

Barrier event: on any trading day during the measurement period, (i) the closing level of the underlier is less than the lower barrier or (ii) the closing level of the underlier is greater than the upper barrier.

Lower barrier: 70% of the initial underlier level

Upper barrier: 130% of the initial underlier level

Trade date: January 31, 2023

Original issue date: February 3, 2023

Determination date: February 2, 2026, unless the calculation agent determines that a market disruption event occurs or is continuing on such day or such day is not a trading day. In that event, the determination date will be the first following trading day on which the calculation agent determines that a market disruption event does not occur and is not continuing. However, the determination date will not be postponed to a date later than the originally scheduled stated maturity date or, if the originally scheduled stated maturity date is not a business day, later than the first business day after the originally scheduled stated maturity date. If a market disruption event

occurs or is continuing on the day that is the last possible determination date or such last possible day is not a trading day, that day will nevertheless be the determination date.

Stated maturity date: February 5, 2026, 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.

Closing level: for any given trading day, the official closing level of the underlier or any successor underlier published by the underlier sponsor on such trading day

Trading day: a day on which the respective principal securities markets for all of the underlier stocks are open for trading, the underlier sponsor is open for business and the underlier is calculated and published by the underlier sponsor

Successor underlier: any substitute underlier approved by the calculation agent as a successor underlier as provided under “— Discontinuance or modification of the underlier” below

Underlier sponsor: at any time, the person or entity, including any successor sponsor, that determines and publishes the underlier as then in effect. The notes are not sponsored, endorsed, sold or promoted by the underlier sponsor or any of its affiliates and the underlier sponsor and its affiliates make no representation regarding the advisability of investing in the notes.

Underlier stocks: at any time, the stocks that comprise the underlier as then in effect, after giving effect to any additions, deletions or substitutions

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

- a suspension, absence or material limitation of trading in underlier stocks constituting 20% or more, by weight, of the underlier on their respective primary markets, in each case 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 underlier or to underlier stocks constituting 20% or more, by weight, of the underlier in the respective primary markets for those contracts, in each case 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
- underlier stocks constituting 20% or more, by weight, of the underlier, or option or futures contracts, if available, relating to the underlier or to underlier stocks constituting 20% or more, by weight, of the underlier do not trade on what were the respective primary markets for those underlier stocks or contracts, 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 the underlier or to any underlier stock.

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

- a price change exceeding limits set by that market,
- an imbalance of orders relating to that underlier stock or those contracts, or

- a disparity in bid and ask quotes relating to that underlier stock or those contracts,

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

Consequences of a market disruption event or a non-trading day: If a market disruption event occurs or is continuing on a day that would otherwise be the determination date, or such day is not a trading day, then the determination date will be postponed as described under “— Determination date” above.

If the calculation agent determines that the closing level of the underlier is not available on the last possible determination date because of a market disruption event, a non-trading day or for any other reason (other than as described under “— Discontinuance or modification of the underlier” below), then calculation agent will nevertheless determine the level of the underlier based on its assessment, made in its sole discretion, of the level of the underlier on that day.

Discontinuance or modification of the underlier: If the underlier sponsor discontinues publication of the underlier and the underlier sponsor or anyone else publishes a substitute underlier that the calculation agent determines is comparable to the underlier and approves as a successor underlier, or if the calculation agent designates a substitute underlier, then the calculation agent will determine the amount payable on the stated maturity date by reference to such successor underlier.

If the calculation agent determines that the publication of the underlier is discontinued and there is no successor underlier, the calculation agent will determine the amount payable on the stated maturity date by a computation methodology that the calculation agent determines will as closely as reasonably possible replicate the underlier.

If the calculation agent determines that (i) the underlier, the underlier stocks or the method of calculating the underlier is changed at any time in any respect - including any addition, deletion or substitution and any reweighting or rebalancing of the underlier or the underlier stocks and whether the change is made by the underlier sponsor under its existing policies or following a modification of those policies, is due to the publication of a successor underlier, is due to events affecting one or more of the underlier stocks or their issuers or is due to any other reason - and is not otherwise reflected in the level of the underlier by the underlier sponsor pursuant to the then-current underlier methodology of the underlier or (ii) there has been a split or reverse split of the underlier, then the calculation agent will be permitted (but not required) to make such adjustments in the underlier or the method of its calculation as it believes are appropriate to ensure that the levels of the underlier, used to determine the amount payable on the stated maturity date, is equitable.

All determinations and adjustments to be made by the calculation agent with respect to the underlier may be made by the calculation agent in its sole discretion. The calculation agent is not obligated to make any such adjustments.

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

Tax characterization: The holder, on behalf of itself and any other person having a beneficial interest in this note, hereby agrees with the company (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to characterize this note for all U.S. federal income tax purposes as a debt instrument subject to the special rules governing contingent payment debt instruments.

Overdue principal rate: the effective Federal Funds rate

HYPOTHETICAL 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 the various hypothetical underlier levels during the measurement period including on the determination date could have on the cash settlement amount at maturity assuming all other variables remain constant.

The examples below are based on a range of underlier levels that are entirely hypothetical; no one can predict what the underlier level will be on any day during the measurement period, and no one can predict what the final underlier level will be on the determination date. The underlier has been highly volatile in the past — meaning that the underlier level has changed considerably in relatively short periods — and its 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 the stated maturity date. If you sell your notes in a secondary market prior to the stated maturity date, 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 underlier, 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 PS-11 of this pricing 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
Upper barrier	130% of the initial underlier level
Lower barrier	70% of the initial underlier level
Contingent return	12.5%
Neither a market disruption event nor a non-trading day occurs during the measurement period, including on the originally scheduled determination date	
No change in or affecting any of the underlier stocks or the method by which the underlier sponsor calculates the underlier	
Notes purchased on original issue date at the face amount and held to the stated maturity date	

For these reasons, the actual performance of the underlier over the life of your notes, as well as the amount payable at maturity, may bear little relation to the hypothetical examples shown below or to the historical underlier levels shown elsewhere in this pricing supplement. For information about the historical levels of the underlier during recent periods, see “The Underlier — Historical Closing Levels of the Underlier” below. Before investing in the offered notes, you should consult publicly available information to determine the levels of the underlier between the date of this pricing supplement and the date of your purchase of the offered 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 underlier stocks.

The levels in the left column of the table below represent hypothetical final underlier levels and are expressed as percentages of the initial underlier level. The amounts in the middle column represent the hypothetical cash settlement amounts, based on the corresponding hypothetical final underlier level, assuming that **a barrier event does not occur** (i.e., the closing level of the underlier is not less than the lower barrier or greater than the upper barrier on any trading day during the measurement period), and are expressed as percentages of the face amount of a note (rounded to the nearest one-thousandth of a percent). The amounts in the right column represent the hypothetical cash settlement amounts, based on the corresponding hypothetical final underlier level, assuming that **a barrier event occurs** (i.e., the closing level of the underlier is less than the lower barrier or greater than the upper barrier on one or more trading days during the measurement period), and are expressed as percentages of the face amount of a note (rounded to the nearest one-thousandth of a percent). Thus, a hypothetical cash settlement amount of 100.000% means that the value of the cash payment that we would

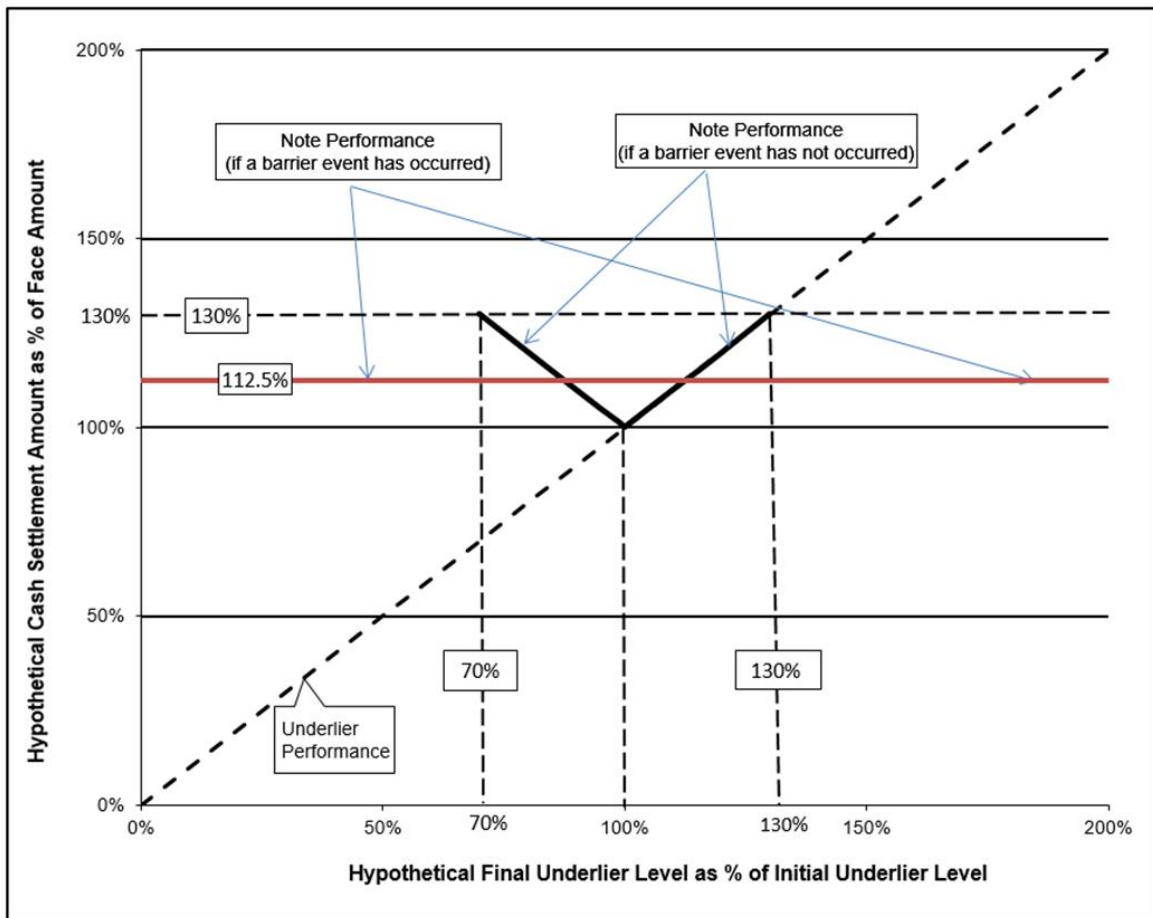
deliver for each \$1,000 of the outstanding face amount of the offered notes on the stated maturity date would equal 100.000% of the face amount of a note, based on the corresponding hypothetical final underlier level and the assumptions noted above.

Hypothetical Final Underlier Level (as Percentage of Initial Underlier Level)	Hypothetical Cash Settlement Amount (as Percentage of Face Amount)	
	Barrier Event Has Not Occurred	Barrier Event Has Occurred
200.000%	N/A	112.500%
175.000%	N/A	112.500%
150.000%	N/A	112.500%
130.000%	130.000%	112.500%
120.000%	120.000%	112.500%
118.000%	118.000%	112.500%
112.500%	112.500%	112.500%
105.000%	105.000%	112.500%
101.000%	101.000%	112.500%
100.000%	100.000%	112.500%
95.000%	105.000%	112.500%
90.000%	110.000%	112.500%
87.500%	112.500%	112.500%
82.000%	118.000%	112.500%
80.000%	120.000%	112.500%
70.000%	130.000%	112.500%
65.000%	N/A	112.500%
60.000%	N/A	112.500%
50.000%	N/A	112.500%
25.000%	N/A	112.500%
0.000%	N/A	112.500%

If, for example, **a barrier event has occurred** and the final underlier level were determined to be 150.000% of the initial underlier level, the cash settlement amount that we would deliver on your notes at maturity would be 112.500% for each \$1,000 face amount of your notes, as shown in the table above. Additionally, if the final underlier level were determined to be 50.000% of the initial underlier level, the cash settlement amount that we would deliver on your notes at maturity would be 112.500% for each \$1,000 face amount of your notes, as shown in the table above.

If, for example, **a barrier event has not occurred** and the final underlier level were determined to be 90.000% of the initial underlier level, the absolute underlier return would be 10.000% and the cash settlement amount that we would deliver on your notes at maturity would be 110.000% for each \$1,000 face amount of your notes, as shown in the table above. However, you will benefit from the absolute underlier return only if a barrier event has not occurred. Because a barrier event will occur if, on any trading day during the measurement period (including the determination date), the closing level of the underlier is below the lower barrier (70.000% of the initial underlier level) or above the upper barrier (130.000% of the initial underlier level), the cash settlement amount that we will deliver at maturity if a barrier event has not occurred will be limited to between 100.000% and 130.000% (representing a return of between 0.000% and 30.000%) for each \$1,000 face amount. As a result, you would not benefit from a final underlier level on the determination date (or a closing level of the underlier on any other trading day during the measurement period) that is greater than the upper barrier or less than the lower barrier. In fact, a final underlier level on the determination date (or a closing level of the underlier on any other trading day during the measurement period) that is greater than the upper barrier or less than the lower barrier will cause the cash settlement amount that we will deliver at maturity to be limited to 112.500% (representing a contingent return of 12.500%) for each \$1,000 face amount. Further, you should be aware that, even if a barrier event has not occurred, the cash settlement amount that we will deliver at maturity will be less than 112.500% (representing less than the contingent return of 12.500%) for each \$1,000 face amount if the final underlier level is less than 112.500%, but greater than 87.500% of the initial underlier, as shown in the table above.

The following chart also shows a graphical illustration of the hypothetical cash settlement amounts (expressed as a percentage of the face amount of your notes) that we would pay on your notes on the stated maturity date, if the final underlier level were any of the hypothetical levels shown on the horizontal axis. The chart shows that, if a barrier event occurs at any time during the measurement period, any hypothetical final underlier level would result in a hypothetical payment amount of 112.500% for each \$1,000 face amount of the note (the horizontal line that crosses the 112.500% marker on the vertical axis). The chart also shows that, if a barrier event does not occur at any time during the measurement period, any hypothetical final underlier level between 70.000% and 130.000% (the section between the 70.000% and 130.000% markers on the horizontal axis) would result in a hypothetical payment amount that is greater than or equal to 100.000%, but less than or equal to 130.000%, for each \$1,000 face amount of the note (the section on or above the 100.000% marker on the vertical axis but on or below the 130.000% marker on the vertical axis).



The cash settlement amounts shown above are entirely hypothetical; they are based on market prices for the underlier stocks that may not be achieved on the determination date and on assumptions that may prove to be erroneous. The actual market value of your notes on the stated maturity date or at any other time, including any time you may wish to sell your notes, may bear little relation to the hypothetical cash settlement amounts shown above, and these amounts should not be viewed as an indication of the financial return on an investment in the offered notes. The hypothetical cash settlement amounts on notes held to the stated maturity date in the examples above assume you purchased your notes at their face amount and have not been adjusted to reflect the actual issue price you pay for your notes. The return on your investment (whether positive or negative) in your notes will be affected by the amount you pay for your notes. If you purchase your notes for a price other than the face amount, the return on your investment will differ from, and may be significantly lower than, the hypothetical

returns suggested by the above examples. Please read “Additional Risk Factors Specific to Your Notes — The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors” on page PS-13.

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 pricing supplement.

We cannot predict the actual final underlier level or what the market value of your notes will be on any particular trading day, nor can we predict the relationship between the underlier level and the market value of your notes at any time prior to the stated maturity date. The actual amount that you will receive at maturity and the rate of return on the offered notes will depend on the actual closing levels of the underlier during the measurement period and the actual final underlier level determined by the calculation agent as described above. Moreover, the assumptions on which the hypothetical returns are based may turn out to be inaccurate. Consequently, the amount of cash to be paid in respect of your notes on the stated maturity date may be very different from the information reflected in the examples above.

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, in the accompanying prospectus supplement, under “Additional Risk Factors Specific to the Securities” in the accompanying underlier supplement no. 31 and under “Additional Risk Factors Specific to the Notes” in the accompanying general terms supplement no. 2,913. You should carefully review these risks and considerations as well as the terms of the notes described herein and in the accompanying prospectus, the accompanying prospectus supplement, the accompanying underlier supplement no. 31 and the accompanying general terms supplement no. 2,913. Your notes are a riskier investment than ordinary debt securities. Also, your notes are not equivalent to investing directly in the underlier stocks, i.e., the stocks comprising the underlier to which your notes are linked. 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 "Additional Risk Factors Specific to the Notes — Your Notes May Not Have an Active Trading Market" on page S-7 of the accompanying general terms supplement no. 2,913.

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

Although the return on the notes will be based on the performance of the underlier, 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.

The Potential for the Value of Your Notes to Increase Will Be Limited

If a barrier event has not occurred, the cash settlement amount at maturity for each \$1,000 face amount of your notes will be limited to between \$1,000, on the lower end of the range, and \$1,300, on the higher end of the range (representing a return of 0%, on the lower end of the range, and 30% on the higher end of the range), depending on the absolute underlier return. If a barrier event has occurred, the cash settlement amount at maturity for each \$1,000 face amount of your notes will be limited to \$1,125 (representing the contingent return of 12.5%), regardless of the underlier return.

You will benefit from the absolute underlier return only if a barrier event has not occurred. Because a barrier event will occur if, on any trading day during the measurement period (including the determination date), the closing level of the underlier is less than the lower barrier or greater than the upper barrier, the cash settlement amount that we will deliver at maturity if a barrier event has not occurred will be limited to between 100%, on the lower end of the range, and 130%, on the higher end of the range (representing a return of between 0%, on the lower end of the range, and 30%, on the higher end of the range) for each \$1,000 face amount. As a result, you would not benefit from a final underlier level on the determination date (or a closing level of the underlier on any other trading day during the measurement period) that is greater than the upper barrier or less than the lower barrier. In fact, a final underlier level on the determination date (or a closing level of the underlier on any other trading day during the measurement period) that is greater than the upper barrier or less than the lower barrier will cause the cash settlement amount that we will deliver at maturity to be limited to 112.5% (representing the contingent return of 12.5%) for each \$1,000 face amount. Further, you should be aware that, even if a barrier event has not occurred, the cash settlement amount that we will deliver at maturity will be less than 112.5% (representing less than the contingent return of 12.5%) for each \$1,000 face amount if the final underlier level is less than 112.5% but greater than 87.5% of the initial underlier level.

The Return on Your Notes May Change Significantly Despite Only a Small Change in the Underlier Level

Your ability to participate in any change in the level of the underlier over the life of your notes will be limited and the return on your notes may change significantly despite only a small change in the underlier level. If a barrier event occurs and the final underlier level is greater than the initial underlier level, your return on the notes is limited to the contingent return no matter how much the final underlier level may increase above the initial underlier level. This means that, while an increase in the level of the underlier of 30% will not cause a barrier event to occur, an increase of greater than 30% will cause a barrier event to occur and your return on the notes will be limited to the contingent return. Accordingly, if a barrier event occurs and the underlier return is positive,

the amount payable for each of your notes may be significantly less than it would have been had you invested directly in the underlier stocks.

Similarly, if a barrier event occurs and the final underlier level is less than the initial underlier level, your return will be limited to the contingent return and you will not receive the benefit of the absolute underlier return. This means that, while a decrease in the level of the underlier of 30% will not cause a barrier event to occur, a decrease of greater than 30% will cause a barrier event to occur and your return on the notes will be limited to the contingent return. Accordingly, if a barrier event occurs and the underlier return is negative, you will not receive the benefit of the absolute underlier return.

Further, if a barrier event does not occur and the final underlier level is less than the initial underlier level but greater than 87.5% of the initial underlier level, your return on the notes will be less than the contingent return notwithstanding the benefit from the absolute underlier return.

Your Notes Do Not Bear Interest

You will not receive any interest payments on your notes. As a result, even if the cash settlement amount payable for your notes on the stated maturity date exceeds the face amount of your notes, the overall return you earn on your notes may be less than you would have earned by investing in a non-indexed debt security of comparable maturity that bears interest at a prevailing market rate.

You Have No Shareholder Rights or Rights to Receive Any Underlier Stock

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

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 pricing supplement. The issue price of the notes in the subsequent sale may differ substantially (higher or lower) from the original issue price you paid as provided on the cover of this pricing supplement.

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:

- whether a barrier event has occurred;
- the level of the underlier;
- the volatility — i.e., the frequency and magnitude of changes — in the closing level of the underlier;
- the dividend rates of the underlier stocks;
- economic, financial, regulatory, political, military, public health and other events that affect stock markets generally and the underlier stocks, and which may affect the closing level of the underlier;
- 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 may influence the market value of your notes 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 prior to maturity, you may receive less than the face amount of your notes. You cannot predict the future performance of the underlier based on its historical performance.

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 cash settlement amount 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 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 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.

Risks Related to Tax

Your Notes Will Be Treated as Debt Instruments Subject to Special Rules Governing Contingent Payment Debt Instruments for U.S. Federal Income Tax Purposes

The notes will be treated 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, even though you will not receive any payments from us until maturity. 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, 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.

THE UNDERLIER

The S&P 500® Index includes a representative sample of 500 companies in leading industries of the U.S. economy and is intended to provide a performance benchmark for the large-cap U.S. equity markets.

For more details about the underlier, the underlier sponsor and license agreement between the underlier sponsor and the issuer, see “The Underliers — S&P 500® Index” on page S-106 of the accompanying underlier supplement no. 31.

The S&P 500® Index is a product of S&P Dow Jones Indices LLC, and has been licensed for use by GS Finance Corp. (“Goldman”). Standard & Poor’s® and S&P® are registered trademarks of Standard & Poor’s Financial Services LLC; Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC (“Dow Jones”) and these trademarks have been licensed for use by S&P Dow Jones Indices LLC and sublicensed for certain purposes by Goldman. Goldman’s notes are not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC, Dow Jones, Standard & Poor’s Financial Services LLC or any of their respective affiliates and neither S&P Dow Jones Indices LLC, Dow Jones, Standard & Poor’s Financial Services LLC or any of their respective affiliates make any representation regarding the advisability of investing in such notes.

Historical Closing Levels of the Underlier

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

You should not take the historical levels of the underlier as an indication of the future performance of the underlier, including because of the recent volatility described above. We cannot give you any assurance that the future performance of the underlier or the underlier stocks will result in your receiving an amount greater than the outstanding face amount of your notes on the stated maturity date.

Neither we nor any of our affiliates make any representation to you as to the performance of the underlier. Before investing in the offered notes, you should consult publicly available information to determine the levels of the underlier between the date of this pricing supplement and the date of your purchase of the offered notes **and, given the recent volatility described above, you should pay particular attention to recent levels of the underlier.** The actual performance of the underlier over the life of the offered notes, as well as the cash settlement amount, may bear little relation to the historical closing levels shown below.

The graph below shows the daily historical closing levels of the underlier from January 1, 2018 through January 31, 2023. As a result, the following graph does not reflect the global financial crisis which began in 2008, which had a materially negative impact on the price of most equity securities and, as a result, the level of most equity indices. We obtained the closing levels in the graph below from Bloomberg Financial Services, without independent verification.

Historical Performance of the S&P 500® Index



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. It applies to you only if you hold your notes as a capital asset for tax purposes. 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 regulated investment company;
- a life insurance company;
- a tax-exempt organization;
- a partnership;
- an accrual method taxpayer subject to special tax accounting rules as a result of its use of financial statements;
- a person that owns the notes as a hedge or that is hedged against interest rate risks;
- a person that owns the notes 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 subsection describes the tax consequences to a United States holder. You are a United States holder if you are a beneficial owner of notes 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.

Your notes will be treated as debt instruments subject to special rules governing contingent payment debt instruments for U.S. federal income tax purposes. Under those rules, and subject to the discussion below regarding fixed but deferred contingent payments, 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. These rules will have the effect of requiring you to include amounts in income in respect of your notes over their term based on the comparable yield for the notes, even though you will not receive any payments from us until maturity.

We have determined that the comparable yield for the notes is equal to 4.74% per annum, compounded semi-annually, with a projected payment at maturity of \$1,151.20 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
February 3, 2023 through December 31, 2023	\$43.52	\$43.52
January 1, 2024 through December 31, 2024	\$50.05	\$93.57
January 1, 2025 through December 31, 2025	\$52.45	\$146.02
January 1, 2026 through February 5, 2026	\$5.18	\$151.20

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 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. 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 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 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, 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) 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 (as described in the accompanying prospectus).

Except as described below with respect to certain fixed but deferred contingent payments, any gain you recognize upon the sale, exchange, or maturity of your notes will be ordinary interest income and 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.

Fixed but deferred contingent payments

Notwithstanding the rules described above, special rules apply to a contingent payment debt instrument where all the remaining contingent payments on such instrument become fixed more than six months before all of the contingent payments on such instrument become due. This rule would apply to your notes, for example, if on a date that is more than six months prior to maturity a barrier event occurs. Although not entirely clear, we think that in such a case it would be reasonable for an initial holder of the notes to recognize an ordinary loss equal to any interest previously accrued on the notes that is in excess of the contingent return, and to cease accruing interest over the remainder of the notes. Thereafter, any gain or loss you recognize from a subsequent sale of the notes should generally be characterized as capital gain or loss.

The application to your notes of the rules governing contingent payments that become fixed are not clear, and the Internal Revenue Service could assert that the tax consequences to you should be different than described above. You are urged to consult your tax advisor regarding the application of these rules to your particular circumstances.

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.

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 amounts you receive upon the sale, exchange, 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 stocks included in the underlier 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 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, 2025, 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.

SUPPLEMENTAL PLAN OF DISTRIBUTION; CONFLICTS OF INTEREST

See “Supplemental Plan of Distribution” on page S-49 of the accompanying general terms supplement no. 2,913 and “Plan of Distribution — Conflicts of Interest” on page 129 of the accompanying prospectus. GS Finance Corp. estimates that its share of the total offering expenses, excluding underwriting discounts and commissions, will be approximately \$10,000.

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 pricing 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 pricing supplement, and to certain securities dealers at such price less a concession not in excess of 1% of the face amount. GS&Co. will pay a fee of 0.5% from the concession to Axio Financial LLC in connection with its marketing efforts related to the offered notes. 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 been advised that GS&Co. will also pay a fee in connection with the distribution of the notes to SIMON Markets LLC, a broker-dealer in which an affiliate of GS Finance Corp. holds an indirect minority equity interest.

We will deliver the notes against payment therefor in New York, New York on February 3, 2023. Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes on any date prior to two business days 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 will not be listed on any securities exchange or interdealer quotation system.

VALIDITY OF THE NOTES AND GUARANTEE

In the opinion of Sidley Austin LLP, as counsel to GS Finance Corp. and The Goldman Sachs Group, Inc., when the notes offered by this pricing supplement have been executed and issued by GS Finance Corp., such notes have been authenticated by the trustee pursuant to the indenture, and such notes have been delivered against payment as contemplated herein, (a) such notes will be valid and binding obligations of GS Finance Corp., enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith), provided that such counsel expresses no opinion as to the effect of fraudulent conveyance, fraudulent transfer or similar provision of applicable law on the conclusions expressed above and (b) the guarantee with respect to such notes will be a valid and binding obligation of The Goldman Sachs Group, Inc., enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith), provided that such counsel expresses no opinion as to the effect of fraudulent conveyance, fraudulent transfer or similar provision of applicable law on the conclusions expressed above. This opinion is given as of the date hereof and is limited to the laws of the State of New York and the General Corporation Law of the State of Delaware as in effect on the date hereof. In addition, this opinion is subject to customary assumptions about the trustee's authorization, execution and delivery of the indenture and the genuineness of signatures and certain factual matters, all as stated in the letter of such counsel dated February 23, 2021, which has been filed as Exhibit 5.6 to the registration statement on Form S-3 filed with the Securities and Exchange Commission by GS Finance Corp. and The Goldman Sachs Group, Inc. on February 23, 2021.

We have not authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this pricing supplement, the accompanying general terms supplement no. 2,913, the accompanying underlier supplement no. 31, 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 pricing supplement, the accompanying general terms supplement no. 2,913, the accompanying underlier supplement no. 31, 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 pricing supplement, the accompanying general terms supplement no. 2,913, the accompanying underlier supplement no. 31, the accompanying prospectus supplement and the accompanying prospectus is current only as of the respective dates of such documents

\$358,000

GS Finance Corp.

Absolute Return Trigger S&P 500® Index-Linked Notes due 2026

guaranteed by

The Goldman Sachs Group, Inc.



Goldman Sachs & Co. LLC

The prospectus to which this Exhibit is attached is a final prospectus for the related offering. The maximum aggregate offering price for such offering is \$358,000.