

GOLDMAN SACHS GROUP INC

Form 424B2

December 31, 2018

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Registration Statement No.333-219206

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing 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 December 31, 2018.

GS Finance Corp.

\$

Callable Contingent Coupon Index-Linked Notes due
guaranteed by

The Goldman Sachs Group, Inc.

The notes will not pay a fixed coupon and may pay no coupon on a payment date. The amount that you will be paid on your notes is based on the performances of the Russell 2000® Index and the S&P 500® Index. The notes will mature on January 31, 2024, unless we redeem them.

We may redeem your notes at 100% of their face amount plus any coupon then due on any payment date (expected to be the last calendar day of each January, April, July and October, commencing in April 2019 and ending on the stated maturity date) on or after the payment date in January 2020 up to the payment date in October 2023.

If we do not redeem your notes, if the closing level of each index is greater than or equal to 60% of its initial level (set on the trade date, expected to be January 28, 2019) on a coupon observation date (expected to be the tenth scheduled trading day for all indices prior to each payment date), you will receive on the applicable payment date a coupon of between \$15.875 and \$18.375 (set on the trade date) for each \$1,000 face amount of your notes. If the closing level of any index on a coupon observation date is less than 60% of its initial level, you will not receive a coupon on the applicable payment date.

If we do not redeem your notes, the amount that you will be paid on your notes at maturity, in addition to the final coupon, if any, is based on the performance of the lesser performing index (the index with the lowest index return).

The index return for each index is the percentage increase or decrease in the final level of such index on the final coupon observation date (expected to be January 17, 2024) from its initial level.

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

if the index return of each index is greater than or equal to -40% (the final level of each index is greater than or equal to 60% of its initial level), \$1,000 plus the final coupon of between \$15.875 and \$18.375; or

if the index return of any index is less than -40% (the final level of any index is less than 60% of its initial level), the sum of (i) \$1,000 plus (ii) the product of (a) the lesser performing index return times (b) \$1,000. You will receive less than 60% of the face amount of your notes and you will not receive a 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 PS-12.

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 \$890 and \$940 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 January 31, 2019 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; Conflicts of Interest" on page PS-51.

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. dated , 2019.

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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 expected to be between \$890 and \$940 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 E 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. 1,734 dated July 10, 2017

Prospectus supplement dated July 10, 2017

Prospectus dated July 10, 2017

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 a master global note.

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TERMS AND CONDITIONS

(Terms From Pricing Supplement No. Incorporated Into Master Note No. 2)

These terms and conditions relate to pricing supplement no. dated ,2019 of GS Finance Corp. and The Goldman Sachs Group, Inc. with respect to the issuance by GS Finance Corp. of its Callable Contingent Coupon Index-Linked Notes due and the guarantee thereof by The Goldman Sachs Group, Inc.

The provisions below are hereby incorporated into master note no. 2, dated August 22, 2018. References herein to “this note” shall be deemed to refer to “this security” in such master note no. 2, dated August 22, 2018. Certain defined terms may not be capitalized in these terms and conditions even if they are capitalized in master note no. 2, dated August 22, 2018. Defined terms that are not defined in these terms and conditions shall have the meanings indicated in such master note no. 2, dated August 22, 2018, unless the context otherwise requires.

CUSIP / ISIN: 40056ERF7 / US40056ERF78

Company (Issuer): GS Finance Corp.

Guarantor: The Goldman Sachs Group, Inc.

Underliers (each individually, an underlier): the Russell 2000[®] Index (current Bloomberg symbol: “RTY Index”), or any successor underlier, and the S&P 500[®] Index (current Bloomberg symbol: “SPX Index”), or any successor underlier, as each may be modified, 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 ” below, on the stated maturity date, in addition to the final coupon, if any, the company will pay, for each \$1,000 of the outstanding face amount, an amount, if any, in cash equal to the cash settlement amount.

Cash settlement amount:

·if the final underlier level of each underlier is greater than or equal to its trigger buffer level, \$1,000; or

·if the final underlier level of any underlier is less than its trigger buffer level, the sum of (i) \$1,000 plus (ii) the product of (a) the lesser performing underlier return times (b) \$1,000

Company’s redemption right: the company may redeem the notes, at its option, in whole but not in part, on each coupon payment date commencing in January 2020 and ending in October 2023 for an amount in cash for each \$1,000 of the outstanding face amount on the redemption date equal to 100% of such \$1,000 face amount plus any coupon then due.

If the company chooses to exercise the company’s redemption right, it will notify the holder of your notes and the trustee by giving at least ten business days’ prior notice. The day the company gives the notice, which will be a business day, will be the redemption notice date and the immediately following coupon payment date, which the company will state in the redemption notice, will be the redemption date.

The company will not give a redemption notice that results in a redemption date later than the October 2023 coupon payment date. A redemption notice, once given, shall be irrevocable.

Initial underlier level (set on the trade date): with respect to an underlier, the closing level of such underlier on the trade date

Final underlier level: with respect to an underlier, the closing level of such 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 an underlier” below

Underlier return: with respect to an underlier on the determination date, the quotient of (i) its final underlier level minus its initial underlier level divided by (ii) its initial underlier level, expressed as a positive or negative percentage

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Lesser performing underlier return: the underlier return of the lesser performing underlier

Lesser performing underlier: the underlier with the lowest underlier return

Trigger buffer level: for each underlier, 60% of its initial underlier level

Coupon (set on the trade date): 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 level of each underlier on the related coupon observation date is greater than or equal to its coupon trigger level, between \$15.875 and \$18.375; or

· if the closing level of any underlier on the related coupon observation date is less than its coupon trigger level, \$0

Coupon trigger level: for each underlier, 60% of its initial underlier level

Trade date: expected to be January 28, 2019

Original issue date (set on the trade date): expected to be January 31, 2019

Determination date: the last coupon observation date, expected to be January 17, 2024, subject to adjustment as described under “— Coupon observation dates” below. If the stated maturity date is postponed due to a non-business day as described under “Stated maturity date” below, such postponement of the stated maturity date will not postpone the determination date.

Stated maturity date (set on the trade date): expected to be January 31, 2024, unless that day is not a business day, in which case the stated maturity date will be postponed to the next following business day. If the determination date is postponed as described under “— Determination date” above, such postponement of the determination date will not postpone the stated maturity date.

Coupon observation dates (set on the trade date): expected to be the tenth scheduled trading day for all underliers prior to each coupon payment date, unless the calculation agent determines that, with respect to any underlier, a market disruption event occurs or is continuing on that day or that day is not otherwise a trading day. If a coupon payment date is postponed due to a non-business day as described under “— Coupon payment dates” below, such postponement of the coupon payment date will not postpone the related coupon observation date.

In the event the originally scheduled coupon observation date is a non-trading day with respect to any underlier, the coupon observation date will be the first day thereafter that is a trading day for all underliers (the “first qualified coupon trading day”) provided that no market disruption event occurs or is continuing with respect to an underlier on that day. If a market disruption event with respect to an underlier 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 underlier 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 level of each underlier 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 level of an underlier 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 by more than three scheduled trading days for all underliers from the originally scheduled coupon observation date either due to the occurrence of serial non-trading days or due to the occurrence of one or more market disruption events. (For the avoidance of doubt, a day that is a scheduled trading day for only one underlier will not count as one of the three scheduled trading days for this purpose.) 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 underlier 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 underlier, that day will nevertheless be the coupon observation date.

Coupon payment dates (set on the trade date): expected to be the last calendar day of each January, April, July and October, commencing in April 2019 and ending on the stated maturity date, unless, for any such coupon payment date, that day is not a business day, in which case such coupon payment date will be postponed to the next following business day. If a coupon observation date is postponed as described under “— Coupon observation dates” above, such postponement of the coupon observation date will not postpone the related coupon payment date.

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Closing level: on any trading day, (i) with respect to the Russell 2000[®] Index, the closing level of such underlier or any successor underlier reported by Bloomberg Financial Services, or any successor reporting service the company may select, on such trading day for that underlier (as of the trade date, whereas the underlier sponsor publishes the official closing level of the Russell 2000[®] Index to six decimal places, Bloomberg Financial Services reports the closing level to fewer decimal places) and (ii) with respect to the S&P 500[®] Index, the official closing level of such underlier or any successor underlier published by the underlier sponsor on such trading day for such underlier

Trading day: with respect to an underlier, a day on which the respective principal securities markets for all of its underlier stocks are open for trading, the underlier sponsor is open for business and such underlier is calculated and published by the underlier sponsor. A day is a scheduled trading day with respect to an underlier if, as of the trade date, the respective principal securities markets for all of its underlier stocks are scheduled to be open for trading, the underlier sponsor is scheduled to be open for business and such underlier is expected to be calculated and published by the underlier sponsor on such day.

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

Underlier sponsor: with respect to an underlier, at any time, the person or entity, including any successor sponsor, that determines and publishes such underlier as then in effect. The notes are not sponsored, endorsed, sold or promoted by any underlier sponsor or any affiliate thereof and no underlier sponsor or affiliate thereof makes any representation regarding the advisability of investing in the notes.

Underlier stocks: with respect to an underlier, at any time, the stocks that comprise such 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 an 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 such 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 an 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 an 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 an 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 an 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.

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A market disruption event with respect to one underlier will not, by itself, constitute a market disruption event for the other unaffected underlier.

As is the case throughout this pricing supplement, references to the underlier in this description of market disruption events includes any successor underlier as it may be modified, replaced or adjusted from time to time.

Consequences of a market disruption event or a non-trading day: With respect to any underlier, if a market disruption event occurs or is continuing on a day that would otherwise be a coupon observation date (and the determination date in the case of the last 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 (and the determination date in the case of the last coupon observation date) is postponed to the last possible date due to the occurrence of serial non-trading days, the level of each underlier will be the calculation agent’s assessment of such level, in its sole discretion, on such last possible postponed coupon observation date (and the determination date in the case of the last coupon observation date). If any coupon observation date (and the determination date in the case of the last coupon observation date) is postponed due to a market disruption event with respect to any underlier, the closing level of each underlier with respect to such coupon observation date (and the final underlier level with respect to the determination date) will be calculated based on (i) for any underlier 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 level of the underlier on that date, (ii) for any underlier 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 level of the underlier on the first following trading day on which no market disruption event exists for such underlier and (iii) the calculation agent’s assessment, in its sole discretion, of the level of any underlier on the last possible postponed coupon observation date with respect to such underlier 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 level on any coupon observation date (or final underlier level on the determination date) of each underlier being determined on different calendar dates. For the avoidance of doubt, once the closing level for an underlier is determined for a coupon observation date (or the determination date in the case of the last coupon observation date), the occurrence of a later market disruption event or non-trading day will not alter such calculation. Discontinuance or modification of an underlier: If an underlier sponsor discontinues publication of an underlier and such underlier sponsor or anyone else publishes a substitute underlier that the calculation agent determines is comparable to such underlier and approves as a successor underlier, or if the calculation agent designates a substitute underlier, then the calculation agent will determine the coupon payable, if any, on the relevant coupon payment date or the cash settlement amount on the stated maturity date, as applicable, by reference to such successor underlier. If the calculation agent determines on a coupon observation date or the determination date, as applicable, that the publication of an underlier is discontinued and there is no successor underlier, the calculation agent will determine the coupon or the cash settlement amount, as applicable, on the related coupon payment date or the stated maturity date, as applicable, by a computation methodology that the calculation agent determines will as closely as reasonably possible replicate such underlier.

If the calculation agent determines that an underlier, the underlier stocks comprising that underlier or the method of calculating that underlier is changed at any time in any respect — including any split or reverse-split and any addition, deletion or substitution and any reweighting or rebalancing of the underlier or of 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, then the calculation agent will be permitted (but not required) to make such adjustments in such underlier or the method of its calculation as it believes are appropriate to ensure that the levels of such underlier used to determine the coupon or cash settlement amount, as applicable, on the related coupon payment date or the stated maturity date, as applicable, is equitable.

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

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)

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

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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 an income-bearing pre-paid derivative contract in respect of the underliers.

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

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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 (i) the impact that various hypothetical closing levels of the underliers on a coupon observation date could have on the coupon payable, if any, on the related coupon payment date and (ii) the impact that various hypothetical closing levels of the lesser performing underlier 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 closing level of any underlier will be on any day throughout the life of your notes, what the closing level of any underlier will be on any coupon observation date and what the final underlier level of the lesser performing underlier will be on the determination date. The underliers have been highly volatile in the past — meaning that the underlier levels 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 the stated maturity date or date of early redemption. If you sell your notes in a secondary market prior to the stated maturity date or date of early redemption, 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 underliers, 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-12 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

Coupon \$15.875

Trigger buffer level with respect to each underlier, 60% of its initial underlier level

Coupon trigger level with respect to each underlier, 60% of its initial underlier level

Neither a market disruption event nor a non-trading day occurs on any originally scheduled coupon observation date or the originally scheduled determination date

No change in or affecting any of the underlier stocks or the method by which the applicable underlier sponsor calculates any underlier

Notes purchased on original issue date at the face amount and held to the stated maturity date or date of early redemption

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

For these reasons, the actual performance of the underliers over the life of your notes, the actual underlier levels on any coupon observation date, as well as the coupon payable, if any, on each coupon payment date, 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 underlier levels during recent periods, see “The Underliers — Historical Closing Levels of the Underliers” on page PS-18. Before investing in the notes, you should consult publicly available information to determine the underlier levels between the date of this pricing 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 underlier stocks.

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Hypothetical Coupon Payments

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

Scenario 1

Hypothetical Coupon Observation Date	Hypothetical Closing Level of the Russell 2000® Index (as Percentage of Initial Underlier Level)	Hypothetical Closing Level of the S&P 500® Index (as Percentage of Initial Underlier Level)	Hypothetical Coupon
First	110%	40%	\$0
Second	50%	50%	\$0
Third	60%	55%	\$0
Fourth	70%	85%	\$15.875
Fifth	55%	50%	\$0
Sixth	50%	55%	\$0
Seventh	80%	95%	\$15.875
Eighth	60%	50%	\$0
Ninth	60%	50%	\$0
Tenth	70%	45%	\$0
Eleventh	50%	110%	\$0
Twelfth – Twentieth	55%	50%	\$0
		Total Hypothetical Coupons	\$31.75

In Scenario 1, the hypothetical closing level of each underlier increases and decreases by varying amounts on each hypothetical coupon observation date. Because the hypothetical closing level of each underlier on the fourth and seventh hypothetical coupon observation dates is greater than or equal to its hypothetical coupon trigger level, the total of the hypothetical coupons in Scenario 1 is \$31.75. Because the hypothetical closing level of at least one underlier on all other hypothetical coupon observation dates is less than its hypothetical coupon trigger level, no further coupons will be paid, including at maturity.

Scenario 2

Hypothetical Coupon Observation Date	Hypothetical Closing Level of the Russell 2000® Index (as Percentage of Initial Underlier Level)	Hypothetical Closing Level of the S&P 500® Index (as Percentage of Initial Underlier Level)	Hypothetical Coupon
First	50%	60%	\$0
Second	55%	65%	\$0
Third	40%	55%	\$0
Fourth	45%	60%	\$0
Fifth	50%	65%	\$0
Sixth	110%	55%	\$0
Seventh	35%	45%	\$0
Eighth	45%	40%	\$0
Ninth	55%	55%	\$0

Tenth	50%	50%	\$0
Eleventh	50%	110%	\$0
Twelfth – Twentieth	55%	60%	\$0
		Total Hypothetical Coupons	\$0

In Scenario 2, the hypothetical closing level of each underlier increases and decreases by varying amounts on each hypothetical coupon observation date. Because in each case the hypothetical closing level of at least one underlier on the related coupon observation date is less than its hypothetical coupon trigger level, you will not receive a coupon payment on the applicable hypothetical coupon payment date. Since this occurs on every hypothetical coupon observation date, the overall return you earn on your notes will be less than zero. Therefore, the total of the hypothetical coupons in Scenario 2 is \$0.

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Scenario 3

Hypothetical Coupon	Hypothetical Closing Level of the Russell 2000® Index (as Percentage of Initial Underlier Level)	Hypothetical Closing Level of the S&P 500® Index (as Percentage of Initial Underlier Level)	Hypothetical Coupon
First	50%	45%	