

GOLDMAN SACHS GROUP INC

Form 424B2

November 05, 2018

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Filed Pursuant to Rule 424(b)(2)  
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 November 5, 2018.

**GS Finance Corp.**

\$

Leveraged Buffered Russell 1000<sup>®</sup> Value Index-Linked Notes due

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 (expected to be January 13, 2022) is based on the performance of the Russell 1000<sup>®</sup> Value Index as measured from the trade date (expected to be November 8, 2018) to and including the determination date (expected to be January 10, 2022).

If the final index level on the determination date is greater than the initial index level (set on the trade date), the return on your notes will be positive and will equal 1.5 *times* the index return, subject to the maximum settlement amount of between \$1,390 and \$1,450 (set on the trade date) for each \$1,000 face amount of your notes. If the final index level declines by up to 30% from the initial index level, you will receive the face amount of your notes.

If the final index level declines by more than 30% from the initial index level, the return on your notes will be negative and you will lose approximately 1.4286% of the face amount of your notes for every 1% that the final index level has declined below 70% of the initial index level. See page PS-5. **You could lose a significant portion of the face amount of your notes.**

To determine your payment at maturity, we will calculate the index return, which is the percentage increase or decrease in the final index level from the initial index 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 is *positive* (the final index level is *greater than* the initial index level), the *sum* of (i) \$1,000 *plus* (ii) the *product* of (a) \$1,000 *times* (b) 1.5 *times* (c) the index return, subject to the maximum settlement amount;

if the index return is *zero or negative* but *not below -30%* (the final index level is *equal to* the initial index level or is *less than* the initial index level, but not by more than 30%), \$1,000; or

if the index return is *negative* and is *below -30%* (the final index level is *less than* the initial index level by more than 30%), the *sum* of (i) \$1,000 *plus* (ii) the *product* of (a) the buffer rate of approximately 142.86% (see page PS-5) *times* (b) the *sum* of the index return *plus 30% times* (c) \$1,000. **You will receive less than the face amount of your notes.**

**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 \$970 and \$999 per \$1,000 face amount. For a discussion of the estimated value and the price at which Goldman Sachs & Co. LLC would initially buy or sell your notes, if it makes a market in the notes, see the following page.*

**Original issue date:** expected to be November 14, 2018, **Original issue price:** 100% of the face amount

**Underwriting discount:** % of the face amount **Net proceeds to the issuer:** % 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.    dated                    , 2018.

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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 \$970 and \$999 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:

Product supplement no. 1.738 dated July 10, 2017

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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**Leveraged Buffered Russell 1000<sup>®</sup> Value Index-Linked Notes due**

**INVESTMENT THESIS**

You should be willing to forgo:

gains greater than a maximum settlement amount of between 139% and 145% of the face amount in exchange for (i) 1.5x leveraged upside participation if the underlier return is positive and (ii) a buffer against loss of principal in the event of a decline of up to 30% in the final underlier level relative to the initial underlier level.

interest payments and risk losing your entire investment for the potential to earn 150% of any positive underlier return up to a maximum settlement amount of between 139% and 145% of the face amount.

Your maximum return on your notes will not be greater than between 39% and 45%, and you could lose all or a portion of your investment if the underlier return is less than -30%.

**DETERMINING THE CASH SETTLEMENT AMOUNT**

At maturity, for each \$1,000 face amount, the investor will receive (in each case as a percentage of the face amount):

if the final underlier level is greater than 100% of the initial underlier level, 100% *plus* 150% times the underlier return, subject to a maximum settlement amount of between 139% and 145%;

if the final underlier level is equal to or less than 100% of the initial underlier level but greater than or equal to 70% of the initial underlier level, 100%; or

if the final underlier level is less than 70% of the initial underlier level, 100% *minus* approximately 1.4286% for every 1% that the final underlier level has declined below 70% of the initial underlier level

**If the final underlier level declines by more than 30% from the initial underlier level, the return on the notes will be negative and the investor could lose their entire investment in the notes.**

**KEY TERMS**

|                   |  |
|-------------------|--|
| <b>Issuer:</b>    | GS Finance Corp.   |
| <b>Guarantor:</b> | The Goldman Sachs Group, Inc.  |
| <b>Underlier:</b> | The Russell 1000 <sup>®</sup> Value Index (current Bloomberg symbol: RLV Index ) |

|                                   |  |
|-----------------------------------|--|
| <b>Face Amount:</b>               | \$            in the aggregate; each note will have a face amount equal to \$1,000   |
| <b>Trade Date:</b>                | Expected to be November 8, 2018  |
| <b>Settlement Date:</b>           | Expected to be November 14, 2018   |
| <b>Determination Date:</b>        | Expected to be January 10, 2022  |
| <b>Stated Maturity Date:</b>      | Expected to be January 13, 2022  |
| <b>Initial Underlier Level:</b>   | To be determined on the trade date   |
| <b>Final Underlier Level:</b>     | The closing level of the underlier on the determination date   |
| <b>Underlier Return:</b>          | The <i>quotient</i> of (i) the final underlier level <i>minus</i> the initial underlier level <i>divided by</i> (ii) the initial underlier level, expressed as a positive or negative percentage |
| <b>Upside Participation Rate:</b> | 150%   |
| <b>Buffer Level:</b>              | 70% of the initial underlier level (equal to an underlier return of -30%)  |
| <b>Buffer Amount:</b>             | 30%  |
| <b>Buffer Rate:</b>               | The <i>quotient</i> of the initial underlier level <i>divided by</i> the buffer level, which equals approximately 142.86%  |
| <b>Maximum Settlement Amount:</b> | Expected to be between \$1,390 and \$1,450   |
| <b>Cap Level:</b>                 | Expected to be between 126% and 130% of the initial underlier level  |
| <b>CUSIP/ISIN:</b>                | 40056EDW5 / US40056EDW57   |

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| <b>Hypothetical Final Underlier Level (as Percentage of Initial Underlier Level)</b> | <b>Hypothetical Cash Settlement Amount (as Percentage of Face Amount)</b> |
|--|---|
| 200.000%   | 139.000%  |
| 195.000%   | 139.000%  |
| 170.000%   | 139.000%  |
| 145.000%   | 139.000%  |
| <b>126.000%</b>  | <b>139.000%</b>   |
| 115.000%   | 122.500%  |
| 110.000%   | 115.000%  |
| 105.000%   | 107.500%  |
| <b>100.000%</b>  | <b>100.000%</b>   |
| 90.000%  | 100.000%  |
| 80.000%  | 100.000%  |
| <b>70.000%</b>   | <b>100.000%</b>   |
| 60.000%  | 85.714%   |
| 50.000%  | 71.429%   |
| 25.000%  | 35.714%   |
| <b>0.000%</b>  | <b>0.000%</b>   |

\*assumes a cap level set at the bottom of the cap level range (between 126% and 130% of the initial underlier level)

**RISKS**

Please read the section entitled "Additional Risk Factors Specific to Your Notes" of this pricing supplement as well as the risks and considerations described in the accompanying prospectus dated July 10, 2017, in the accompanying prospectus supplement dated July 10, 2017, under "Additional Risk Factors Specific to the Underlier-Linked Notes" in the accompanying product supplement no. 1,738 dated July 10, 2017, and under "Additional Risk Factors Specific to the Notes" in the accompanying general terms supplement no. 1,734 dated July 10, 2017.

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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      , 2018 of GS Finance Corp. and The Goldman Sachs Group, Inc. with respect to the issuance by GS Finance Corp. of its Leveraged Buffered Russell 1000® Value 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:** 40056EDW5 / US40056EDW57

**Company (Issuer):** GS Finance Corp.

**Guarantor:** The Goldman Sachs Group, Inc.

**Underlier:** the Russell 1000® Value Index (current Bloomberg symbol: RLV Index ), or any successor underlier, as it 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:** On the stated maturity date, 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 is *greater than or equal to* the cap level, the maximum settlement amount;

if the final underlier level is *greater than* the initial underlier level but *less than* the cap level, the *sum* of (1) \$1,000 *plus* (2) the *product* of (i) \$1,000 *times* (ii) the upside participation rate *times* (iii) the underlier return;

if the final underlier level is *equal to* or *less than* the initial underlier level but *greater than or equal to* the buffer level, \$1,000; or



if the final underlier level is *less than* the buffer level, the *sum* of (1) \$1,000 *plus* (2) the product of (i) \$1,000 *times* (ii) the buffer rate *times* (iii) the *sum* of the underlier return *plus* the buffer amount

**Initial underlier level (set on the trade date):**

**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

**Cap level (set on the trade date):** expected to be between 126% and 130% of the initial underlier level

**Maximum settlement amount (set on the trade date):** expected to be between \$1,390 and \$1,450

**Upside participation rate:** 150%

**Underlier return:** the quotient of (1) the final underlier level minus the initial underlier level divided by (2) the initial underlier level, expressed as a percentage

**Buffer level:** 70% of the initial underlier level

**Buffer rate:** the quotient of the initial underlier level divided by the buffer level, which equals approximately 142.86%

**Buffer amount:** 30%

**Trade date:** expected to be November 8, 2018

**Original issue date (set on the trade date):** expected to be November 14, 2018

**Determination date (set on the trade date):** expected to be January 10, 2022, 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

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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 (set on the trade date):** expected to be January 13, 2022, 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 closing level of the underlier or any successor underlier reported by Bloomberg Financial Services, or any successor reporting service the company may select, on such trading day for such underlier. As of the trade date, whereas the underlier sponsor publishes the official closing level of the underlier to six decimal places, Bloomberg Financial Services reports the closing level to fewer decimal places

**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, 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

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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 that must be used to determine the cash settlement amount is not available on the postponed determination date because of a market disruption event, a non-trading day or for any other reason (except as described under Discontinuance or modification of the underlier below), the calculation agent will nevertheless determine the closing 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 any other person or entity 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 the underlier, the underlier stocks or the method of calculating the underlier is changed at any time in any respect - including any split or reverse-split of the underlier and any addition, deletion or substitution and any reweighting or rebalancing 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 the underlier or the method of its calculation as it believes are appropriate to ensure that the final underlier level, 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 pre-paid derivative contract in respect of the underlier.

**Overdue principal rate:** the effective Federal Funds rate

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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 merely are intended to illustrate the impact that the various hypothetical underlier levels 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 final underlier levels that are entirely hypothetical; the underlier level on any day throughout the life of the notes, including the final underlier level on the determination date, cannot be predicted. 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 table 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-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                             |
| Upside participation rate | 150%                                |
| Cap level                 | 126% of the initial underlier level |
| Maximum settlement amount | \$1,390                             |

Buffer level 70% of the initial underlier level

Buffer rate approximately 142.86%

Buffer amount 30%

Neither a market disruption event nor a non-trading day occurs 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

Moreover, we have not yet set the initial underlier level that will serve as the baseline for determining the underlier return 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 level may differ substantially from the underlier level prior to the trade date.

For these reasons, the actual performance of the underlier over the life of your notes, as well as the amount payable at maturity, if any, 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 right column represent the hypothetical cash settlement amounts, based on the corresponding hypothetical final underlier level, 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

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100.000% of the face amount of a note, based on the corresponding hypothetical final underlier level and the assumptions noted above.

| <b>Hypothetical Final Underlier Level</b>         | <b>Hypothetical Cash Settlement Amount</b> |
|---|--|
| <b>(as Percentage of Initial Underlier Level)</b> | <b>(as Percentage of Face Amount)</b>      |
| 200.000%  | 139.000%                                   |
| 195.000%  | 139.000%                                   |
| 170.000%  | 139.000%                                   |
| 145.000%  | 139.000%                                   |
| <b>126.000%</b>                                   | <b>139.000%</b>                            |
| 115.000%  | 122.500%                                   |
| 110.000%  | 115.000%                                   |
| 105.000%  | 107.500%                                   |
| <b>100.000%</b>                                   | <b>100.000%</b>                            |
| 90.000%   | 100.000%                                   |
| 80.000%   | 100.000%                                   |
| <b>70.000%</b>                                    | <b>100.000%</b>                            |
| 60.000%   | 85.714%                                    |
| 50.000%   | 71.429%                                    |
| 25.000%   | 35.714%                                    |
| <b>0.000%</b>                                     | <b>0.000%</b>                              |

If, for example, the final underlier level were determined to be 25.000% of the initial underlier level, the cash settlement amount that we would deliver on your notes at maturity would be approximately 35.714% of the face amount of your notes, as shown in the table above. As a result, if you purchased your notes on the original issue date at the face amount and held them to the stated maturity date, you would lose approximately 64.286% of your investment (if you purchased your notes at a premium to face amount you would lose a correspondingly higher percentage of your investment). If the final underlier level were determined to be 0.000% of the initial underlier level, you would lose your entire investment in the notes. In addition, if the final underlier level were determined to be 200.000% of the initial underlier level, the cash settlement amount that we would deliver on your notes at maturity would be capped at the maximum settlement amount, or 139.000% of each \$1,000 face amount of your notes, as shown in the table above. As a result, if you held your notes to the stated maturity date, you would not benefit from any increase in the final underlier level over 126.000% of the initial underlier level.

The following chart shows a graphical illustration of the hypothetical cash settlement amounts 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 hypothetical cash settlement amounts in the chart are expressed as percentages of the face amount of your notes and the hypothetical final underlier levels are expressed as percentages of the initial underlier level. The chart shows that any hypothetical final underlier level of less than 70.000% (the section left of the 70.000% marker on the horizontal axis) would result in a hypothetical cash settlement amount of less than 100.000% of the face amount of your notes (the section below the 100.000% marker on the vertical axis) and, accordingly, in a loss of principal to the holder of the notes. The chart also shows that any hypothetical final underlier level of greater than or equal to



126.000% (the section right of the 126.000% marker on the horizontal axis) would result in a capped return on your investment.

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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 the Underlier-Linked Notes – The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors** on page S-32 of the accompanying product supplement no. 1,738.

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.

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*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, if any, at maturity and the rate of return on the offered notes will depend on the actual initial underlier level, cap level and maximum settlement amount, which we will set on the trade date, 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, if any, on the stated maturity date may be very different from the information reflected in the examples above.*

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**Table of Contents****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 Notes in the accompanying general terms supplement no. 1,734 and under Additional Risk Factors Specific to the Underlier-Linked Notes in the accompanying product supplement no. 1,738. 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 general terms supplement no. 1,734 and the accompanying product supplement no. 1,738. 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 suited to your particular circumstances.*

**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 Additional Risk Factors Specific to the Underlier-Linked Notes The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors on page S-32 of the accompanying product supplement no. 1,738.

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).

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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 Underlier-Linked Notes – Your Notes May Not Have an Active Trading Market** on page S-31 of the accompanying product supplement no. 1,738.

### **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 E Program – How the Notes Rank Against Other Debt** on page S-4 of the accompanying prospectus supplement and **Description of Debt Securities We May Offer – Guarantee by The Goldman Sachs Group, Inc.** on page 42 of the accompanying prospectus.

### **The Amount Payable on Your Notes Is Not Linked to the Level of the Underlier at Any Time Other Than the Determination Date**

The final underlier level will be based on the closing level of the underlier on the determination date (subject to adjustment as described elsewhere in this pricing supplement). Therefore, if the closing level of the underlier dropped precipitously on the determination date, the cash settlement amount for your notes may be significantly less than it would have been had the cash settlement amount been linked to the closing level of the underlier prior to such drop in the level of the underlier. Although the actual level of the underlier on the stated maturity date or at other times during the life of your notes may be higher than the final underlier level, you will not benefit from the closing level of the underlier at any time other than on the determination date.

### **You May Lose Your Entire Investment in the Notes**

You can lose your entire investment in the notes. The cash payment on your notes, if any, on the stated maturity date will be based on the performance of the underlier as measured from the initial underlier level set on the trade date to the closing level on the determination date. If the final underlier level is *less than* the buffer level, you will have a loss for each \$1,000 of the face amount of your notes equal to the *product* of (i) the buffer rate *times* (ii) the *sum* of the underlier return *plus* the buffer amount *times* (iii) \$1,000. Thus, you may lose your entire investment in the notes, which would include any premium to face amount you paid when you purchased the notes.

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

### **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.

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

Your ability to participate in any change in the value of the underlier over the life of your notes will be limited because of the cap level. The maximum settlement amount will limit the cash settlement amount you may receive for each of your notes at maturity, no matter how much the level of the underlier may rise beyond the cap level over the life of your notes. Accordingly, the amount payable for each of your notes may be significantly less than it would have been had you invested directly in the underlier.

**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.

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**There Is No Guarantee That the Index Methodology Will Be Successful**

The underlier is designed to track the large- and mid-capitalization segment of the U.S. equity market and is predominantly comprised of value stocks, meaning stocks issued by companies thought to be undervalued by the market relative to comparable companies. There is no guarantee that the underlier will outperform any other index or strategy that tracks the large- and mid-capitalization segment of the U.S. equity market using other criteria. Companies that are considered to be value oriented may have lower growth potential relative to comparable companies, which may cause the level of the underlier to decrease over the term of the notes. Accordingly, the investment strategy represented by the underlier may not be successful, and your investment in the notes may result in a loss. An investment in the notes may also underperform an investment linked to the Russell 1000<sup>®</sup> Index as a whole.

**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.

**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. In addition, the impact of the buffer level and the cap level on the return on your investment will depend upon the price you pay for your notes relative to face amount. For example, if you purchase your notes at a premium to face amount, the cap level will only permit a lower positive return on your investment in the notes than would have been the case for notes purchased at face amount or a discount to face amount. Similarly, the buffer level, while still providing some protection for the return on the notes, will allow a greater percentage decrease in your investment in the notes than would have been the case for notes purchased at face amount or a discount to face amount.

**Your Notes May Be Subject to an Adverse Change in Tax Treatment in the Future**

The tax consequences of an investment in your notes are uncertain, both as to the timing and character of any inclusion in income in respect of your notes.

The Internal Revenue Service announced on December 7, 2007 that it is considering issuing guidance regarding the proper U.S. federal income tax treatment of an instrument such as your notes, and any such guidance could adversely affect the tax treatment and the value of your notes. Among other things, the Internal Revenue Service may decide to require the holders to accrue ordinary income on a current basis and recognize ordinary income on payment at maturity, and could subject non-U.S. investors to withholding tax. Furthermore, in 2007, legislation was introduced in Congress that, if enacted, would have required holders that acquired instruments such as your notes after the bill was enacted to accrue interest income over the term of such instruments even though there will be no interest payments over the term of such instruments. It is not possible to predict whether a similar or identical bill will be enacted in the future, or whether any such bill would affect the tax treatment of your notes. We describe these developments in more



detail under Supplemental Discussion of Federal Income Tax Consequences on page S-41 of the accompanying product supplement no. 1,738. You should consult your tax advisor about this matter. Except to the extent otherwise provided by law, GS Finance Corp. intends to continue treating the notes for U.S. federal income tax purposes in accordance with the treatment described under Supplemental Discussion of Federal Income Tax Consequences on page S-41 of the accompanying product supplement no. 1,738 unless and until such time as Congress, the Treasury Department or the Internal Revenue Service determine that some other treatment is more appropriate.

**United States Alien Holders Should Consider the Withholding Tax Implications of Owning 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 any amounts a United States alien holder receives upon the sale, exchange or maturity of the 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 a United States alien

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holder 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 the United States alien holder's 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, 2021, 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 United States alien 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 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.

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**Table of Contents****THE UNDERLIER**

The Russell 1000<sup>®</sup> Value Index (the index) is sponsored by FTSE Russell ( Russell ) and is a sub-index of the Russell 1000<sup>®</sup> Index. The index is designed to track the performance of the large- and mid-capitalization segment of the U.S. equity market and is predominantly comprised of value stocks, meaning stocks issued by companies thought to be undervalued by the market relative to comparable companies. Additional information about the index is available on the following website: [ftse.com/analytics/factsheets/Home/Search#](http://ftse.com/analytics/factsheets/Home/Search#). We are not incorporating by reference the website or any material it includes in this pricing supplement.

As of November 1, 2018, the top ten constituents of the index (and their respective weightings in the index) were: JPMorgan Chase & Co. (2.80%), Berkshire Hathaway Inc. Class B (2.67%), Exxon Mobil Corp. (2.62%), Johnson & Johnson (2.38%), Bank of America Corp. (1.99%), Pfizer Inc. (1.94%), Verizon Communications, Inc. (1.78%), Wells Fargo & Co. (1.78%), Procter & Gamble Co. (1.71%) and Intel Corp. (1.71%). As of November 1, 2018, the 1,000 companies included in the index were divided into eleven Russell Global Sectors. The Russell Global Sectors include (with the approximate percentage currently included in such sectors indicated in parentheses): Communication Services (7.01%), Consumer Discretionary (5.27%), Consumer Staples (7.80%), Energy (10.03%), Financial Services (22.77%), Health Care (15.29%), Industrials (7.59%), Information Technology (9.58%), Materials (4.04%), Real Estate (4.71%) and Utilities (5.89%). (Sector designations are determined by the index sponsor using criteria it has selected or developed. Index sponsors may use very different standards for determining sector designations. In addition, many companies operate in a number of sectors, but are listed in only one sector and the basis on which that sector is selected may also differ. As a result, sector comparisons between indices with different index sponsors may reflect differences in methodology as well as actual differences in the sector composition of the indices.)

The Russell 1000<sup>®</sup> Index includes approximately 1,000 of the largest securities that form the Russell 3000<sup>®</sup> Index. The Russell 3000<sup>®</sup> Index is comprised of the 3,000 largest U.S. companies, or 98% based on market capitalization, of the investable U.S. equity market. The Russell 1000<sup>®</sup> Index represents approximately 90% of the total market capitalization of the Russell 3000<sup>®</sup> Index.

*Selection of Constituent Stocks of the Russell 1000<sup>®</sup> Value Index*

The index is a sub-index of the Russell 1000<sup>®</sup> Index, which is a sub-index of the Russell 3000<sup>®</sup> Index. To be eligible for inclusion in the Russell 3000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Index, and, consequently, the index, a company's stocks must be listed on the rank day in May of a given year (the timetable is announced each spring) and Russell must have access to documentation verifying the company's eligibility for inclusion. Eligible initial public offerings ( IPOs ) are added to Russell U.S. Indices quarterly, based on total market capitalization rankings within the market-adjusted capitalization breaks established during the most recent reconstitution. To be added to any Russell U.S. index during a quarter outside of reconstitution, IPOs must meet additional eligibility criteria.

A company is included in the U.S. equity markets and is eligible for inclusion in the Russell 3000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Index, and consequently, the index, if that company incorporates in the U.S., has its headquarters in the U.S. and also trades with the highest liquidity in the U.S. If a company does not satisfy all of the above criteria, it can still be included in the U.S. equity market if any one of the following home country indicators is in the United States: (i) country of incorporation, (ii) country of headquarters and (iii) country in which the company trades with the highest liquidity (as defined by a two-year average daily dollar trading volume from all exchanges within the country), and the primary location of that company's assets or its revenue, based on an average of two years of assets or revenues data, is also in the United States. In addition, if there is insufficient information to assign a company to the U.S. equity markets based on its assets or revenue, the company may nonetheless be assigned to the U.S. equity markets if the headquarters of the company is located in the United States or if the headquarters of the company is located in certain

benefit-driven incorporation countries, or BDI countries, and that company's most liquid stock exchange is in the United States. The BDI countries are Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Channel Islands, Cook Islands, Curaçao, Faroe Islands, Gibraltar, Guernsey, Isle of Man, Jersey, Liberia, Marshall Islands, Panama, Saba, Sint Eustatius, Sint Maarten and Turks and Caicos Islands. A U.S.-listed company is not eligible for inclusion within the U.S. equity market if it has been classified by Russell as a China N share on the rank date of the index reconstitution. A company will be considered a China N share if the following criteria are satisfied: (i) the company is incorporated outside of the People's Republic of China, (ii) the company is listed on the NYSE, the NASDAQ or the NYSE MKT, (iii) over 55% of the revenue or assets of the company are derived from the People's Republic of China, and (iv) the company is controlled by a mainland Chinese entity, company or individual

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(if the shareholder background cannot be determined with publicly available information, Russell will consider whether the establishment and origin of the company are in mainland China and whether the company is headquartered in mainland China). ADRs and ADSs are not eligible for inclusion in the Russell 3000<sup>®</sup> Index or the Russell 1000<sup>®</sup> Index, or consequently, the index.

In addition, all securities eligible for inclusion in the Russell 3000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Index, and consequently, the index, must trade on an eligible exchange (BATS, IEX, NYSE, NYSE MKT, NYSE Arca and NASDAQ).

*Exclusions from the Russell 1000<sup>®</sup> Value Index*

Russell specifically excludes the following companies and securities from the Russell 3000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Index, and consequently, the index: (i) preferred and convertible preferred stock, redeemable shares, participating preferred stock, warrants, rights, installment receipts and trust receipts; (ii) royalty trusts, U.S. limited liability companies, closed-end investment companies, companies that are required to report Acquired Fund Fees and Expenses (as defined by the SEC), including business development companies, blank check companies, special-purpose acquisition companies and limited partnerships; (iii) companies with a total market capitalization less than \$30 million; (iv) companies with only a small portion of their shares available in the marketplace (companies with 5% or less float); (v) bulletin board, pink sheets or over-the-counter traded securities, including securities for which prices are displayed on the FINRA ADF; (vi) real estate investment trusts and publicly traded partnerships that generate, or have historically generated, unrelated business taxable income and have not taken steps to block their unrelated business taxable income to equity holders; and (vii) companies with 5% or less of the company's voting rights in the hands of unrestricted shareholders (existing constituents that do not currently have more than 5% of the company's voting rights in the hands of unrestricted shareholders have until the September 2022 review to meet this requirement).

*Initial List of Eligible Securities*

The primary criterion Russell uses to determine the initial list of securities eligible for the Russell 3000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Index and, consequently, the index, is total market capitalization, which is calculated by multiplying the total outstanding shares for a company by the market price as of the rank day for those securities being considered at annual reconstitution. IPOs may be added between constitutions as noted below. All common stock share classes are combined in determining a company's total shares outstanding. If multiple share classes have been combined, the number of total shares outstanding will be multiplied by the primary exchange close price and used to determine the company's total market capitalization. In cases where the common stock share classes act independently of each other (e.g., tracking stocks), each class is considered for inclusion separately. Stocks must have a closing price at or above \$1.00 on their primary exchange or an eligible secondary exchange on the last trading day of May of each year to be eligible for inclusion in the Russell 3000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Index, and consequently, the index. In order to reduce unnecessary turnover, if an existing member's closing price is less than \$1.00 on the rank day in May, it will be considered eligible if the average of the daily closing prices from their primary exchange during the 30 days prior to the rank day is equal to or greater than \$1.00. If an existing member does not trade on the rank day, it must price at \$1.00 or above on another eligible U.S. exchange to remain eligible.

*Multiple Share Classes*

If an eligible company trades under multiple share classes or if a company distributes shares of an additional share class to its existing shareholders through a mandatory corporate action, each share class will be reviewed independently for inclusion. Share classes in addition to the primary vehicle (the pricing vehicle) that have a total

market capitalization larger than the smallest company in the Russell 3000E™ Index, an average daily dollar trading value that exceeds that of the global median, and a float greater than 5% of shares available in the market place are eligible for inclusion.

The pricing vehicle will generally be designated as the share class with the highest two-year trading volume as of the rank day. In the absence of two years worth of data, all available data will be used for this calculation. If the difference between trading volumes for each share class is less than 20%, the share class with the most available shares outstanding will be used as the pricing vehicle. At least 100 day trading volume is necessary to

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consider the class as a pricing vehicle for existing members. New members will be analyzed on all available data, even if that data is for less than 100 days.

**Determining Style**

Russell uses a non-linear probability method to determine whether a stock included in the Russell 1000 Index is included in the Russell 1000<sup>®</sup> Growth Index, the Russell 1000<sup>®</sup> Value Index, or both. The term probability is used to indicate the degree of certainty that a stock belongs in one of those indexes.

Russell uses three variables to determine whether a stock exhibits growth characteristics, value characteristics, or both. One variable book-to-price ratio is used to represent a stock's value characteristics, while two variables I/B/E/S forecast medium-term growth (2 year) and sales per share historical growth (5 year) are used to represent a stock's growth characteristics. Stocks included in the Russell 1000<sup>®</sup> Index are given a ranking for each variable and these rankings are converted to standardized units, where the value variable represents 50% of the score and the two growth variables represent the remaining 50%. They are then combined to produce a composite value score ( CVS ). Stocks included in the Russell 1000<sup>®</sup> Index are then ranked by their CVS, and a probability algorithm is applied to the CVS distribution to assign growth and value weights or probabilities to each stock. In general, a stock with a higher CVS is considered a value stock, a stock with a lower CVS is considered a growth stock and a stock with a CVS in the middle range is considered to have both growth and value characteristics.

*Description of non-linear probability algorithm*

Stock A, in Figure 1, is a security with 20% of its available shares assigned to the Russell 1000<sup>®</sup> Value Index and the remaining 80% assigned to the Russell 1000<sup>®</sup> Growth Index. The growth and value probabilities will always sum to 100%. Hence, the sum of a stock's market capitalization in the Russell 1000<sup>®</sup> Value Index and the Russell 1000<sup>®</sup> Growth Index will always equal its market capitalization in the Russell 1000<sup>®</sup> Index.

**Figure 1: Non-linear probability function for index position weights**

In Figure 1, the quartile breaks are calculated such that approximately 25% of the available market capitalization lies in each quartile. Stocks at the median are divided 50% in the Russell 1000<sup>®</sup> Value Index and 50% in the Russell 1000<sup>®</sup> Growth Index. Stocks below the first quartile are 100% in the Russell 1000<sup>®</sup> Growth Index. Stocks above the third quartile are 100% in the Russell 1000<sup>®</sup> Value Index. Stocks falling between the first and third quartile breaks are in both the Russell 1000<sup>®</sup> Value Index and the Russell 1000<sup>®</sup> Growth Index to varying degrees depending on how far they are above or below the median and how close they are to the first or third quartile breaks, subject to the 5% rule and the banding rule, as described below.

*5% rule*

If a stock's initial weight is more than 95% in either the Russell 1000<sup>®</sup> Value Index or the Russell 1000<sup>®</sup> Growth Index, Russell increases its weight to 100% in that index and removes the stock altogether from the other index. As a result of the 5% rule, roughly 70% of the available market capitalization of the Russell 1000<sup>®</sup> Index is classified as all-growth or all-value. The remaining 30% of stocks have some portion of their market capitalization

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allocated to the Russell 1000<sup>®</sup> Value Index and the Russell 1000<sup>®</sup> Growth Index, depending on their relative distance from the median value score.

*Banding rule*

In an effort to mitigate unnecessary turnover, Russell implements a banding methodology at the CVS level. If (i) a company's CVS change from the previous year is less than plus or minus 0.10 **and** (ii) the company remains in the Russell 1000<sup>®</sup> Index, then the CVS will not be updated during the next reconstitution process. Keeping the CVS static for these companies does not mean the probability (value/growth) will remain unchanged in all cases due to the relation of a CVS score to the overall index. In the past, this banding methodology has reduced turnover caused by smaller, less meaningful movements while continuing to allow the larger, more meaningful changes to occur.

*Market capitalization*

The market capitalization of the Russell 1000<sup>®</sup> Value Index may not equal 50% of the Russell 1000<sup>®</sup> Index because asymmetry in the capitalization distributions within the second and third quartiles may result in a skewed distribution of CVS. When CVS is normally distributed, each of the Russell 1000<sup>®</sup> Value Index and the Russell 1000<sup>®</sup> Growth Index will equal 50% of the Russell 1000<sup>®</sup> Index.

*Missing values, negative values, or low coverage*

Stocks with missing or negative values for their book-to-price ratio, or missing values for I/B/E/S medium-term growth (2 year) (negative I/B/E/S medium-term growth is valid), or missing sales per share historical growth (5 year) (6 years of quarterly numbers are required), are allocated by using the mean value score of the Russell Global Sectors industry, subsector, or sector group into which the company falls in the Russell 1000<sup>®</sup> Index. Each missing (or in the case of book-to-price ratio, negative) variable is substituted with the mean value score of the industry, subsector or sector group independently. An industry must have five members or the substitution reverts to the subsector, and so forth to the sector. In addition, a weighted value score is calculated for securities with low analyst coverage for I/B/E/S medium-term growth. For securities with coverage by a single analyst, 2/3 of the industry, subsector, or sector group value score is weighted with 1/3 the security's independent value score. For those securities with coverage by 2 analysts, 2/3 of the independent security's value score is used and only 1/3 of the industry, subsector, or sector group is weighted. For those securities with at least three analysts contributing to the I/B/E/S medium-term growth variable, 100% of the independent security's value score is used.

*Annual Reconstitution*

The Russell 1000<sup>®</sup> Index and the Russell 1000<sup>®</sup> Value Index are reconstituted annually by Russell to reflect changes in the marketplace. The list of companies is ranked based on total market capitalization on the last trading day in May, with the actual reconstitution occurring on the final Friday of June each year, unless the final Friday in June is the 29th or 30th, in which case reconstitution will occur on the preceding Friday. A full calendar for reconstitution is made available each spring. Changes in the constituents are preannounced and subject to change if any corporate activity occurs or if any new information is received prior to release.

A company's total shares are multiplied by the primary exchange close price of the pricing vehicle and used to determine the company's total market capitalization for the purpose of ranking of companies and determination of index membership. If no volume exists on the primary exchange on the rank day, the last trade price from an eligible secondary exchange will be used where volume exists (using the lowest trade price above \$1.00 if multiple secondary markets exist). The company's rank will be determined based on the cumulative market capitalization. As of the June

2016 reconstitution, any share class not qualifying for eligibility independently will not be aggregated with the pricing vehicle within the available shares calculation.

For mergers and spin-offs that are effective between the rank day and the Friday prior to annual reconstitution in June, the market capitalizations of the impacted securities are recalculated and membership is reevaluated as of the effective date of the corporate action. For corporate events that occur during the final week of reconstitution (during which reconstitution is finalized Friday after U.S. market close), market capitalizations and memberships will not be reevaluated. Non-index members that have been considered ineligible as of rank day will

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not be reevaluated in the event of a subsequent corporate action that occurs between rank day and the reconstitution effective date.

*Index Calculation and Capitalization Adjustments*

As a capitalization-weighted index, the Russell 1000<sup>®</sup> Value Index reflects changes in the capitalization, or market value, of the index stocks relative to the capitalization on a base date. The current Russell 1000<sup>®</sup> Value Index value is the compounded result of the cumulative daily (or monthly) return percentages, where the starting value of the index is equal to the base value (100) and base date (December 31, 1990). Returns between any two dates can then be derived by dividing the ending period index value (IV1) by the beginning period (IV0) index value, so that the return equals  $[(IV1 / IV0) - 1] * 100$ . To calculate the index value, the market values of the index stocks are added together to arrive at the total market capitalization of the index. The market value of an index stock is equal to the *product* of (i) the price of such stock *times* (ii) the number of available shares *times* (iii) the stock's value weight or probability. The last sale prices will be used for exchange traded and NASDAQ stocks. In the event of a market disruption resulting in any index stock price being unavailable, Russell will generally use the last reported price for such index stock to calculate the index.

The weight of a stock included in the Russell 1000<sup>®</sup> Value Index is equal to its weight in the Russell 1000<sup>®</sup> Index *multiplied* by its value weight or probability. Constituent stocks of the Russell 1000<sup>®</sup> Index are weighted by their free-float market capitalization, which is calculated by multiplying the primary closing price by the number of free-float shares. Free-float shares are shares that are available to the public for purchase as determined by Russell. Adjustments to shares are reviewed quarterly (including at reconstitution) and for major corporate actions such as mergers.

The following are excluded from free float: shares directly owned by state, regional, municipal and local governments (excluding shares held by independently managed pension schemes for governments); shares held by sovereign wealth funds where each holding is 10% or greater of the total number of shares in issue; shares held by directors, senior executives and managers of the company, and by their family and direct relations, and by companies with which they are affiliated; shares held within employee share plans; shares held by public companies or by non-listed subsidiaries of public companies; shares held by founders, promoters, former directors, founding venture capital and private equity firms, private companies and individuals (including employees) where the holding is 10% or greater of the total number of shares in issue; all shares where the holder is subject to a lock-in clause (for the duration of that clause, after which free float changes resulting from the expiration of a lock-in clause will be implemented at the next quarterly review subsequent to there being a minimum of 20 business days between the expiration date of such lock-in clause and the Tuesday before the first Friday of the review month; if the previously locked-in shares are sold by way of a corporate event (such as a secondary offering), any change to the free float will be applied T+2 following completion and therefore will not be subject to the minimum 20 business day rule); shares held by an investor, investment company or an investment fund that is actively participating in the management of a company or is holding shares for publicly announced strategic reasons, or has successfully placed a current member to the board of directors of a company; and shares that are subject to ongoing contractual agreements (such as swaps) where they would ordinarily be treated as restricted. In addition, while portfolio holdings such as pension funds, insurance funds or investment companies will generally not be considered as restricted from free float, where a single portfolio holding is 30% or greater it will be regarded as strategic and therefore restricted (and will remain restricted until the holding falls below 30%).

*Corporate Actions Affecting the Index*

Russell adjusts the index on a daily basis in response to certain corporate actions and events. Therefore, a company's membership in the index and its weight in the index can be impacted by these corporate actions. The adjustment is applied based on sources of public information, including press releases and Securities and Exchange Commission filings. Prior to the completion of a corporate action or event, Russell estimates the effective date. Russell will then adjust the anticipated effective date based on public information until the date is considered final. Depending on the time on a given day that an action is determined to be final, Russell will generally either (1) apply the action before the open on the ex-date or (2) apply the action after providing appropriate notice. If Russell has confirmed the completion of a corporate action, scheduled to become effective subsequent to a rebalance, the event may be implemented in conjunction with the rebalance to limit turnover, provided appropriate notice can be given. Russell applies the following methodology guidelines when adjusting the index in response to corporate actions and events:

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*No Replacement Rule* Securities that are deleted from the index between reconstitution dates, for any reason (e.g., mergers, acquisitions or other similar corporate activity) are not replaced. Thus, the number of securities in the index over the past year will fluctuate according to corporate activity.

### *Mergers and Acquisitions*

Adjustments due to mergers and acquisitions are applied to the index after the action is determined to be final. In the event that a constituent is being acquired for cash or is delisted subsequent to an index review, such constituent will be removed from the index in conjunction with the index review, assuming that the action is determined to be final and a minimum of two days' notice can be provided.

Between constituents: When mergers and acquisitions take place between companies that are both constituents of a Russell index for cash, the target company is deleted and shares of the acquiring stock are increased according to the offer terms. When mergers and acquisitions take place between companies that are both constituents of a Russell index for stock, the target company is deleted from the index at the last traded price.

Between a constituent and a non-constituent: If the target company is a member of the Russell 1000<sup>®</sup> Value Index, it is deleted from the index and the acquiring company will be included initially in the index provided it is eligible in all other respects at the time of the merger, regardless of previous eligibility screenings. If the acquiring company is deemed eligible it will be added to the index on the effective date and the opening price will be calculated using the offer terms.

Given sufficient market hours after the confirmation of a merger or acquisition, Russell effects the action after the close on the last day of trading of the target company, or at an appropriate time once the transaction has been deemed to be final.

*Rights Offerings* Rights offered to shareholders are reflected in the index only if the subscription price of the rights is at a discount to the market price of the stock. Provided that Russell has been alerted to the rights offer prior to the ex-date, it will adjust the price of the stock for the value of the rights and increased shares according to the terms of the offering before the open on the ex-date.

*Spin-offs* Spun-off companies are added to the parent company's index if the parent company's market value is reduced simultaneously per the spin-off valuation. Spun-off companies are added to the index at the same time as they are spun-off from their parent company on the ex-date of the distribution.

*Initial Public Offerings* Eligible IPOs are added to the Russell 1000<sup>®</sup> Index based on total market capitalization ranking within the market-adjusted capitalization breaks established at the most recent annual reconstitution.

An IPO of additional share classes will be considered for eligibility and must meet the same eligibility criteria for all other multiple share classes. If at the time of the IPO the additional share class does not meet the eligibility criteria for separate index membership, it will not be added to the index and will subsequently be reviewed for index membership during the next annual reconstitution.

Once IPO additions have been announced, an IPO may be added to the index prior to the previously announced schedule, if a corporate action has deemed this to be appropriate and notice can be provided (e.g. an index member automatically receives shares via a stock distribution into a projected IPO add).

*Tender Offers* A company acquired as a result of a tender offer is removed when (i) (a) offer acceptances reach 90%; (b) shareholders have validly tendered and the shares have been irrevocably accepted for payment; and (c) all pertinent offer conditions have been reasonably met and the acquirer has not explicitly stated that it does not intend to acquire the remaining shares; (ii) where offer acceptances are below 90%, there is reason to believe that the remaining free float is under 5% based on information available at the time; or (iii) following completion of the offer the acquirer has stated intent to finalize the acquisition via a short-form merger, squeeze-out, top-up option or any other compulsory mechanism.

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Where the conditions for index deletion are not met, Russell may implement a free float change based on the reported acceptance results at the expiration of the initial, subsequent or final offer period where (i) the minimum acceptance level as stipulated by the acquiror is met; (ii) shareholders have validly tendered and the shares have been irrevocably accepted for payment; (iii) all pertinent offer conditions have been reasonably met and (iv) the change to the current float factor is greater than 3%. A minimum two day notice period of the change is generally provided. If the offer includes a stock consideration, the acquiring company's shares will be increased proportionate to the free float change of the target company. If the target company's free float change is greater than 3%, the associated change to the acquiring company's shares will be implemented regardless of size. Additionally, if the change to the target company is less than 3%, then no change will be implemented to the target or the acquiring company at the time of the event, regardless of any change to the acquiring company's shares. The target company will then be deleted as a second-step, if the conditions for deletion are achieved at the expiration of a subsequent offer period.

*Delisted and Suspended Stocks* A stock will be deleted as a constituent if it is delisted from all eligible exchanges, becomes bankrupt, files for bankruptcy protection, is insolvent or is liquidated, or where evidence of a change in circumstances makes it ineligible for index inclusion. If, however, a stock is suspended, Russell will determine its treatment as follows:

if a constituent is declared bankrupt without any indication of compensation to shareholders, the last traded price will be adjusted to zero value and the constituent will be removed from the index with T+2 notice;

in all other cases, a constituent will continue to be included in the index for a period of up to 20 business days at its last traded price;

if a constituent continues to be suspended at the end of the 20 business day period, it will be subject to review and a decision will be taken to either allow the constituent to remain in the index for a further period of up to 20 business days or to remove it at zero value. In making this determination, Russell will take into account the stated reasons for the suspension. These reasons may include announcements made by the company regarding a pending acquisition or restructuring, and any stated intentions regarding a date for the resumption of trading. This procedure will be repeated at successive 20 business day intervals thereafter until either trading recommences or the suspension period reaches 80 business days;

if the suspension period reaches 80 business days, Russell will provide notice that the constituent will be removed at zero value following the expiry of at least 40 business days;

in certain limited circumstances where the index weight of the constituent is significant and Russell determines that a market-related value can be established for the suspended constituent, for example because similar company securities continue to trade, deletion may take place at the market-related value instead. In such circumstances, Russell will set out its rationale for the proposed treatment of the constituent at the end of the 80 business day period;

if, following the end of the 80 business day period, a suspended constituent resumes trading before the Wednesday before the first Friday of March, June, September or December, the deletion notice will be rescinded and the constituent will be retained in the index. If the constituent resumes trading after these dates but before the review effective date, the constituent will continue to be removed from the index as previously announced but in these circumstances the deletion may instead be implemented at market value; and

if a constituent has been removed from the index and trading is subsequently restored, the constituent will only be reconsidered for inclusion after a period of 12 months from its deletion. For the purposes of index eligibility, it will be treated as a new issue.

*Bankruptcy and Voluntary Liquidations* Companies that file for a Chapter 7 liquidation bankruptcy or have filed a liquidation plan will be removed from the index at the time of the bankruptcy filing (except when shareholder approval is required to finalize the liquidation plan, in which case the company will be removed once shareholder approval has been granted); whereas companies filing for a Chapter 11 reorganization bankruptcy will remain a member of the index, unless the company is delisted from the primary exchange, in which case normal delisting rules apply. If a company files for bankruptcy, is delisted and it can be confirmed that it will not trade on any market, including OTC, Russell may remove the stock at a nominal price of \$0.0001.

*Stock Distributions and distributions in specie* A price adjustment for stock distributions is applied on the ex-date of the distribution. Where Russell is able to value a distribution in specie prior to the ex-date, a price

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adjustment is made to the company paying the dividend at the open on the ex-date. If no valuation of the distribution exists prior to the ex-date, no price adjustment is applied. Where the company whose holders are receiving the distribution is an index member, its shares will be increased according to the terms of the distribution. If such company is not an index member, the distributed shares will be added to the index until they have been settled and have listed, at which point they will be removed at the last traded price giving appropriate notice.

*Special Cash Dividends* If a constituent pays out a special cash dividend, the price of the stock is adjusted to deduct the dividend amount before the open on the ex-date. No adjustment for regular cash dividends is made in the price return calculation of the Russell 1000<sup>®</sup> Value Index.

*Updates to Shares Outstanding and Free Float* Russell reviews the index quarterly for updates to shares outstanding and to free floats used in calculating the index. The changes are implemented quarterly in March, June, September and December after the close on the third Friday of such month. The June reconstitution will be implemented on the last Friday of June (unless the last Friday occurs on the 29th or 30th of the month, in which case reconstitution will occur on the Friday prior).

In March, September and December shares outstanding and free floats are updated to reflect (i) changes greater than 1% for cumulative shares in issue changes and (ii) changes greater than 3% for cumulative free float changes. In addition, a constituent with a free float of 15% or below will not be subject to the 3% change threshold and will instead be updated if the change is greater than 1%. Updates to shares outstanding and free floats will be implemented each June regardless of size (i.e., the percentage change thresholds above will not be applied). Russell implements the June updates using data sourced primarily from the companies' publicly available information filed with the Securities and Exchange Commission.

Outside of the quarterly update cycle, outstanding shares and free float will be updated with at least two days' notice if prompted by primary or secondary offerings if (i) there is a USD \$1 billion investable market capitalization change related to a primary/secondary offering or (ii) there is a resultant 5% change in index shares related to a primary or secondary offering and a USD \$250 million investable market capitalization change. These changes are implemented after the close on the day that the subscription period closes, assuming two days' notice can be provided. If two days' notice cannot be provided prior to the end of the subscription period, the change will still proceed with two days' notice and will be implemented at the earliest opportunity. If discovery of the event occurs more than two days after the close of the subscription period, the changes are deferred until the quarterly review cycle.

If a company distributes shares of an additional share class to its existing shareholders through a mandatory corporate action, the additional share class will be evaluated for separate index membership. The new share class will be deemed eligible if the market capitalization of the distributed shares meets the minimum size requirement (the market capitalization of the smallest member of the Russell 3000E Index from the previous rebalance as adjusted for performance to date). If the additional share class is not eligible at the time of distribution, it will not be added to the index.

*License Agreement between Frank Russell Company (doing business as Russell Investment Group) and GS Finance Corp.*

Frank Russell Company doing business as Russell Investment Group ( Russell ) and Goldman Sachs International have entered into a non-exclusive license agreement, granting GS Finance Corp., in exchange for a fee, permission to use the Russell 1000<sup>®</sup> Value Index in connection with the offer and sale of the notes. GS Finance Corp. is not affiliated with Russell; the only relationship between Russell and GS Finance Corp. is the licensing of the use of the Russell 1000<sup>®</sup> Value Index (a trademark of Russell) and trademarks relating to the Russell 1000<sup>®</sup> Value Index.

GS Finance Corp. does not accept any responsibility for the calculation, maintenance or publication of the Russell 1000<sup>®</sup> Value Index or any successor index.

The notes are not sponsored, endorsed, sold or promoted by Russell. Russell makes no representation or warranty, express or implied, to the owners of the notes or any member of the public regarding the advisability of investing in securities generally or in the notes particularly or the ability of the Russell 1000<sup>®</sup> Index to track general stock market performance or a segment of the same. Russell's publication of the Russell 1000<sup>®</sup> Value Index in no

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way suggests or implies an opinion by Russell as to the advisability of investment in any or all of the securities upon which the Russell 1000<sup>®</sup> Value Index is based. Russell's only relationship to GS Finance Corp. is the licensing of certain trademarks and trade names of Russell and of the Russell 1000<sup>®</sup> Value Index which is determined, composed and calculated by Russell without regard to GS Finance Corp. or the notes. Russell is not responsible for and has not reviewed the notes nor any associated literature or publications and Russell makes no representation or warranty express or implied as to their accuracy or completeness, or otherwise. Russell reserves the right, at any time and without notice, to alter, amend, terminate or in any way change the Russell 1000<sup>®</sup> Index. Russell has no obligation or liability in connection with the administration, marketing or trading of the notes.

RUSSELL DOES NOT GUARANTEE THE ACCURACY AND/OR THE COMPLETENESS OF THE RUSSELL 1000<sup>®</sup> VALUE INDEX OR ANY DATA INCLUDED THEREIN AND RUSSELL SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS, OR INTERRUPTIONS THEREIN. RUSSELL MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY GS FINANCE CORP., INVESTORS, OWNERS OF THE NOTES, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE RUSSELL 1000<sup>®</sup> VALUE INDEX OR ANY DATA INCLUDED THEREIN. RUSSELL MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE RUSSELL 1000<sup>®</sup> VALUE INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL RUSSELL HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

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**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. 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.** 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. 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 November 1, 2008 through November 1, 2018. We obtained the closing levels in the graph below from Bloomberg Financial Services, without independent verification. Although the official closing levels of the Russell 1000<sup>®</sup> Value Index are published to six decimal places by the underlier sponsor, Bloomberg Financial Services reports the levels of the Russell 1000 Value Index to fewer decimal places.

**Historical Performance of the Russell 1000<sup>®</sup> Value Index**

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**SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES**

You will be obligated pursuant to the terms of the notes in the absence of a change in law, an administrative determination or a judicial ruling to the contrary to characterize each note for all tax purposes as a pre-paid derivative contract in respect of the underlier, as described under Supplemental Discussion of Federal Income Tax Consequences on page S-41 of the accompanying product supplement no. 1,738. Pursuant to this approach, it is the opinion of Sidley Austin LLP that upon the sale, exchange or maturity of your notes, it would be reasonable for you to recognize capital gain or loss equal to the difference, if any, between the amount of cash you receive at such time and your tax basis in your notes. 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 FATCA withholding. However, according to published guidance, the withholding tax described above will not apply to payments of gross proceeds from the sale, exchange or other disposition of the notes made before January 1, 2019.

**SUPPLEMENTAL PLAN OF DISTRIBUTION; CONFLICTS OF INTEREST**

See Supplemental Plan of Distribution on page S-49 of the accompanying product supplement no. 1,738 and Plan of Distribution Conflicts of Interest on page 94 of the accompanying prospectus. GS Finance Corp. estimates that its share of the total offering expenses, excluding underwriting discounts and commissions, will be approximately \$ .

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 % of the face amount. 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 expect to deliver the notes against payment therefor in New York, New York on November 14, 2018. 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.

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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 product supplement no. 1,738, the accompanying general terms supplement no. 1,734, 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 product supplement no. 1,738, the accompanying general terms supplement no. 1,734, 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 product supplement no. 1,738, the accompanying general terms supplement no. 1,734, the accompanying prospectus supplement and the accompanying prospectus is current only as of the respective dates of such documents.

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**GS Finance Corp.**

Leveraged Buffered Russell 1000<sup>®</sup> Value Index-Linked Notes due

guaranteed by

**The Goldman Sachs Group, Inc.**

**Goldman Sachs & Co. LLC**