

GOLDMAN SACHS GROUP INC

Form 424B2

December 04, 2018

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Registration Statement No. 333-219206

GS Finance Corp.

\$943,000

Motif Capital National Defense 7 ER Index-Linked Notes due 2021

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 (December 3, 2021) is based on the performance of the Motif Capital National Defense 7 ER Index as measured from the trade date (November 30, 2018) to and including the determination date (November 30, 2021). The return on your notes will be positive if the final level on the determination date is greater than the initial level of 131.90 and will reflect the upside participation rate of 140%. If the final level is equal to or less than the initial level, you will receive the face amount of your notes at maturity.

The index tracks the U.S. exchange-listed common equity of public companies that derive at least 10% of their revenue from defense-related sales, principally of weapons systems (and related technologies, equipment and services), to U.S. and foreign governments. Each company must be in one of the following sub-industry classifications: aerospace & defense, construction & engineering, construction machinery & heavy trucks, IT consulting & other services, electronic equipment & instruments or communications equipment. A company must include in its annual filing with the SEC a specified keyword related to the key initiatives and mission area categories identified annually by the U.S. Department of Defense or a specific reference to the U.S. Department of Defense. A company must also meet certain minimum market capitalization, price, average daily trading volume and historical information thresholds. See "The Index" on page S-29 for more information.

The index measures the extent to which the stocks and any money market position (described below) outperform 3-month USD LIBOR plus 0.75% per annum (accruing daily). If the index fails to outperform 3-month USD LIBOR plus 0.75% per annum (accruing daily) you will receive no return on your investment. LIBOR is being modified, see page S 17.

The index rebalances annually and the weights of the stocks are based on the percentage of each stock's revenue derived from defense-related sales, subject to minimum and maximum index weight constraints of 0.1% and 10% or less of the index.

However, with respect to each index business day, if the realized volatility of the stocks for a 20 index business day look-back period exceeds 7%, the index will be rebalanced for that day by ratably reallocating all or a portion of the exposure to the stocks in the index to the money market position in an amount sufficient to reduce the realized volatility for such period to 7%. Realized volatility is the degree of variation in the daily closing prices of the aggregate of the stocks included in the index during the applicable 20 index business day look-back period.

The money market position reflects the returns accruing on a hypothetical cash investment in a notional money market account denominated in U.S. dollars that accrues interest at the notional interest rate, which is equal to 3-month USD LIBOR. The index may allocate its entire exposure to the money market position, the return on which will always be less than the sum of the return on 3-month USD LIBOR plus 0.75% per annum (accruing daily).

The greater the percentage of the index allocated to the money market position, the higher the return that will be required on the stocks in order to have a return on your investment. Historically, a very significant portion (up to approximately 92%) of the index consistently has been allocated to the money market position.

To determine your payment at maturity, we will calculate the index return, which is the percentage increase or decrease in the final level from the initial level. 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 level is greater than the initial level), the sum of (i) \$1,000 plus (ii) the product of (a) \$1,000 times (b) 1.4 times (c) the index return; or

·if the index return is zero or negative (the final level is equal to or less than the initial level), \$1,000.

You should read the disclosure herein to better understand the terms and risks of your investment, including the credit risk of GS Finance Corp. and The Goldman Sachs Group, Inc. See page S-8.

The estimated value of your notes at the time the terms of your notes are set on the trade date is equal to approximately \$956 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: December 5, 2018 Original issue price: 100% of the face amount

Underwriting discount: 1.225% of the face amount Net proceeds to the issuer: 98.775% 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

Prospectus Supplement No. 4,664 dated November 30, 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 prospectus supplement, at issue prices and with underwriting discounts and net proceeds that differ from the amounts set forth above. The return (whether positive or negative) on your investment in notes will depend in part on the issue price you pay for such notes.

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

### Estimated Value of Your Notes

The estimated value of your notes at the time the terms of your notes are set on the trade date (as determined by reference to pricing models used by Goldman Sachs & Co. LLC (GS&Co.) and taking into account our credit spreads) is equal to approximately \$956 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 \$44 per \$1,000 face amount).

Prior to November 30, 2019, 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 November 29, 2019). On and after November 30, 2019, 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 prospectus supplement and the accompanying documents listed below. This prospectus supplement constitutes a supplement to the documents listed below and should be read in conjunction with such documents:

- [Prospectus supplement dated July 10, 2017](#)
- [Prospectus dated July 10, 2017](#)

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

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SUMMARY INFORMATION

We refer to the notes we are offering by this prospectus supplement as the “offered notes” or the “notes”. Each of the offered notes has the terms described below and under “Specific Terms of Your Notes” on page S-23. Please note that in this prospectus supplement, references to “GS Finance Corp.”, “we”, “our” and “us” mean only GS Finance Corp. and do not include its subsidiaries or affiliates, references to “The Goldman Sachs Group, Inc.”, our parent company, mean only The Goldman Sachs Group, Inc. and do not include its subsidiaries or affiliates and references to “Goldman Sachs” mean The Goldman Sachs Group, Inc. together with its consolidated subsidiaries and affiliates, including us. Also, references to the “accompanying prospectus” mean the accompanying prospectus, dated July 10, 2017, and references to the “accompanying prospectus supplement” mean the accompanying prospectus supplement, dated July 10, 2017, for Medium-Term Notes, Series E, in each case of GS Finance Corp. and The Goldman Sachs Group, Inc. References to the “indenture” in this prospectus supplement mean 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.

Key Terms

Issuer: GS Finance Corp.

Guarantor: The Goldman Sachs Group, Inc.

Index: Motif Capital National Defense 7 ER Index (Bloomberg symbol, “MCDER Index”), as published by the index sponsor (including any index calculation agent acting on the index sponsor’s behalf); see “The Index” on page S-29

Index calculation agent: Solactive AG

Index sponsor: Motif Capital Management, Inc.

Specified currency: U.S. dollars (“\$”)

Face amount: each note will have a face amount of \$1,000; \$943,000 in the aggregate for all the offered notes; the aggregate face amount of the offered notes may be increased if the issuer, at its sole option, decides to sell an additional amount of the offered notes on a date subsequent to the date of this prospectus supplement

Denominations: \$1,000 and integral multiples of \$1,000 in excess thereof

Purchase at amount other than face amount: the amount we will pay you at the stated maturity date for your notes will not be adjusted based on the issue price you pay for your notes, so if you acquire notes at a premium (or discount) to face amount and hold them to the stated maturity date, it could affect your investment in a number of ways. The return on your investment in such notes will be lower (or higher) than it would have been had you purchased the notes at face amount. See “Additional Risk Factors Specific to Your Notes — 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” on page S-18 of this prospectus supplement

Supplemental discussion of U.S. federal income tax consequences: the notes will be treated as debt instruments subject to the special rules governing contingent payment debt instruments for U.S. federal income tax purposes.

Under this treatment, it is the opinion of Sidley Austin LLP that if you are a U.S. individual or taxable entity, you generally should be required to pay taxes on ordinary income from the notes over their term based on the comparable yield for the notes. In addition, any gain you may recognize on the sale, exchange or maturity of the notes will be taxed as ordinary interest income.

Cash settlement amount (on the stated maturity date): for each \$1,000 face amount of notes, we will pay you on the stated maturity date an amount in cash equal to:

- if the index return is positive, the sum of (i) \$1,000 plus (ii) the product of (a) \$1,000 times (b) the upside participation rate times (c) the index return; or
- if the index return is zero or negative, \$1,000.

Initial index level: 131.90

Final index level: the closing level of the index on the determination date, except in the limited circumstances described under “Specific Terms of Your Notes — Payment of Principal on Stated Maturity Date — Consequences of a Non-Trading Day” on page S-24 and subject to adjustment as provided under “Specific Terms of Your Notes — Payment

of Principal on Stated Maturity Date — Discontinuance or Modification of the Index” on page S-25  
Closing level of the index: as described under “Specific Terms of Your Notes – Special Calculation Provisions – Closing Level of the Index” on page S-26.

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Index return: the quotient of (i) the final index level minus the initial index level divided by (ii) the initial index level, expressed as a positive or negative percentage

Upside participation rate: 140%

Trade date: November 30, 2018

Original issue date (settlement date): December 5, 2018

Stated maturity date: December 3, 2021, subject to postponement as described under “Specific Terms of Your Notes — Stated Maturity Date” on page S-24

Determination date: November 30, 2021, subject to adjustment as described under “Specific Terms of Your Notes — Determination Date” on page S-24

No interest: the notes do not bear interest

No listing: the notes will not be listed on any securities exchange or interdealer market quotation system

No redemption: the notes will not be subject to redemption right or price dependent redemption right

Note calculation agent: GS&Co.

Business day: as described under “Specific Terms of Your Notes — Special Calculation Provisions — Business Day” on page S-26

Trading day: as described under “Specific Terms of Your Notes — Special Calculation Provisions — Trading Day” on page S-26

CUSIP no.: 40056EFT0

ISIN no.: US40056EFT01

FDIC: 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

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## HYPOTHETICAL EXAMPLES

The following examples are provided for purposes of illustration only. They should not be taken as an indication or prediction of future investment results and are intended merely to illustrate the impact that the various hypothetical index 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 index levels that are entirely hypothetical; no one can predict what the index level will be on any day throughout the life of your notes, and no one can predict what the final index level will be on the determination date. The index has been highly volatile in the past — meaning that the index level has changed considerably in relatively short periods — and its performance cannot be predicted for any future period.

The information in the following examples reflects hypothetical rates of return on the offered notes assuming that they are purchased on the original issue date at the face amount and held to the stated maturity date. If you sell your notes in a secondary market prior to the stated maturity date, your return will depend upon the market value of your notes at the time of sale, which may be affected by a number of factors that are not reflected in the examples below such as the volatility of the index, the creditworthiness of GS Finance Corp., as issuer, and the creditworthiness of The Goldman Sachs Group, Inc., as guarantor. In addition, the estimated value of your notes at the time the terms of your notes are set on the trade date (as determined by reference to pricing models used by GS&Co.) is less than the original issue price of your notes. For more information on the estimated value of your notes, see “Additional Risk Factors Specific to Your Notes — The Estimated Value of Your Notes At the Time the Terms of Your Notes Are Set On the Trade Date (as Determined By Reference to Pricing Models Used By GS&Co.) Is Less Than the Original Issue Price Of Your Notes” on page S-8 of this prospectus supplement. The information in the examples also reflects the key terms and assumptions in the box below.

## Key Terms and Assumptions

Face amount                    \$1,000

Upside participation rate 140%

No non-trading day occurs on the originally scheduled determination date

No change in or affecting any of the underlying stocks or the method by which the index sponsor calculates the index

Notes purchased on original issue date and held to the stated maturity date

For these reasons, the actual performance of the index over the life of your notes, as well as the amount payable at maturity may bear little relation to the hypothetical examples shown below or to the historical index performance information or hypothetical performance data shown elsewhere in this prospectus supplement. For historical index performance information and hypothetical performance data of the index during recent periods, see “The Index —Closing Levels of the Index” on page S-49. Before investing in the offered notes, you should consult publicly available information to determine the level of the index between the date of this prospectus supplement and the date of your purchase of the offered notes.

Any rate of return you may earn on an investment in the notes may be lower than that which you could earn on a comparable investment in the underlying stocks.

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 underlying stocks.

The levels in the left column of the table below represent hypothetical final index levels and are expressed as percentages of the initial index level. The amounts in the right column represent the hypothetical cash settlement amounts, based on the corresponding hypothetical final index level (expressed as a percentage of the initial index level), and are expressed as percentages of the face amount of a note (rounded to the nearest one-hundredth of a

percent). Thus, a hypothetical cash settlement amount of 100.00% means that the value of the cash payment that we would deliver for each \$1,000 of the outstanding face amount of the offered notes on the stated maturity date would equal 100.00% of the face amount of a note, based on the corresponding hypothetical final index level (expressed as a percentage of the initial index level) and the assumptions noted above.

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<u>Hypothetical Final Index Level (as Percentage of Initial Index Level)</u>	<u>Hypothetical Cash Settlement Amount (as Percentage of Face Amount)</u>
175.00%	205.00%
150.00%	170.00%
140.00%	156.00%
130.00%	142.00%
120.00%	128.00%
110.00%	114.00%
100.00%	100.00%
90.00%	100.00%
75.00%	100.00%
50.00%	100.00%
25.00%	100.00%
0.00%	100.00%

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If, for example, the final index level were determined to be 25.00% of the initial index level, the cash settlement amount that we would deliver on your notes at maturity would be 100.00% 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 and held them to the stated maturity date, you would receive no return on your investment.

The following chart also shows a graphical illustration of the hypothetical cash settlement amounts (expressed as a percentage of the face amount of your notes) that we would pay on your notes on the stated maturity date, if the final index level (expressed as a percentage of the initial index level) were any of the hypothetical levels shown on the horizontal axis. The chart shows that any hypothetical final index level (expressed as a percentage of the initial index level) of less than 100.00% (the section left of the 100.00% marker on the horizontal axis) would result in a hypothetical cash settlement amount of 100.00% of the face amount of your notes.

The cash settlement amounts shown above are entirely hypothetical; they are based on closing levels of the index 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

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amounts on notes held to the stated maturity date in the examples above assume you purchased your notes at their face amount and have not been adjusted to reflect the actual issue price you pay for your notes. The return on your investment (whether positive or negative) in your notes will be affected by the amount you pay for your notes. If you purchase your notes for a price other than the face amount, the return on your investment will differ from, and may be significantly lower than, the hypothetical returns suggested by the above examples. Please read “Additional Risk Factors Specific to Your Notes — The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors” on page S-17.

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

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

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### ADDITIONAL RISK FACTORS SPECIFIC TO YOUR NOTES

An investment in your notes is subject to the risks described below, as well as the risks and considerations described in the accompanying prospectus and in the accompanying prospectus supplement. You should carefully review these risks and considerations as well as the terms of the notes described herein and in the accompanying prospectus and the accompanying prospectus supplement. Your notes are a riskier investment than ordinary debt securities. Also, your notes are not equivalent to investing directly in any underlying stocks, i.e., the stocks comprising the index 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 "— The Market Value of Your Notes May Be Influenced by Many Unpredictable Factors" below.

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

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

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

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

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### 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 index, 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.

### You May Receive Only the Face Amount of Your Notes at Maturity

If the index return is zero or negative on the determination date, the return on your notes will be limited to the face amount.

Even if the amount paid on your notes at maturity 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 note with the same stated maturity that bears interest at the prevailing market rate.

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

The final index level will be based on the closing level of the index on the determination date (subject to adjustment as described elsewhere in this prospectus supplement). Therefore, if the closing level of the index 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 index prior to such drop in the level of the index. Although the actual level of the index on the stated maturity date or at other times during the life of your notes may be higher than the final index level, you will not benefit from the closing level of the index at any time other than on the determination date.

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 on 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 Index Measures the Performance of the Total Return Index Less the Sum of the Return on the Notional Interest Rate Plus 0.75% Per Annum (Accruing Daily)

Your notes are linked to the index. The index measures the performance of the total return index, which includes the underlying stocks and, in certain circumstances, the money market position, less the sum of the return on the notional interest rate plus 0.75% per annum (accruing daily). Increases in the level of the notional interest rate may offset in whole or in part increases in the levels of the underlying stocks. As a result, any return on the index — and thus on your notes — may be reduced or eliminated, which will have the effect of reducing the amount payable in respect of your notes. The total return index must produce positive returns at least as great as the sum of the return on the notional interest rate plus 0.75% per annum (accruing daily) before the index will have a positive return. If the index fails to outperform 3-month USD LIBOR plus 0.75% per annum (accruing daily) you will receive no return on your investment.

The index, through the total return index, may allocate its entire exposure to the money market position, the return on which will always be less than the sum of the return on 3-month USD LIBOR plus 0.75% per annum (accruing daily). The greater the percentage of the index allocated to the money market position, the higher the return that will be required on the underlying stocks in order to have a return on your investment. Historically, a very significant portion (up to approximately 92%) of the index exposure consistently has been to the money market position.

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### The Underlying Stocks are Concentrated in Six Sub-Industries Within the Industrials and Information Technology Sectors with Defense-Related Sales

The index is comprised of U.S. exchange-listed stocks of companies in six sub-industries within the industrials and information technology sectors that derive at least 10% of their revenue (and in some cases almost all of their revenue) from defense-related sales that may benefit from increased defense-related spending by the United States and foreign governments. Because these companies are concentrated in these six sub-industries within the industrials and information technology sectors (aerospace & defense, construction & engineering, construction machinery & heavy trucks, IT consulting & other services, electronic equipment & instruments and communications equipment), the index is more likely to be adversely affected by the negative performance of any of these sectors (particularly the industrials sector) or sub-industries (particularly the aerospace & defense sub-industry) than an index that has more diversified holdings across a larger number of sectors or sub-industries. Beyond that, the exposure of the index at any time could be limited to the money market position.

Further, as of the close of business on September 21, 2018, MSCI, Inc. and S&P Dow Jones Indices LLC updated the classification structure related to the sub-industries. Among other things, the update reclassified select companies previously classified in the information technology sector prior to September 21, 2018 (which included the IT consulting & other services, electronic equipment & instruments and communications equipment sub-industries) into a newly created communications services sector. Any company previously included in the IT consulting & other services, electronic equipment & instruments or communications equipment sub-industry prior to September 21, 2018 that is reclassified as a result of the updates will no longer be eligible for inclusion in the index. The classification structure changes are expected to be considered in connection with the June 2019 annual index review. It is not known if, or how, these updates could affect the index or its constituents at that time.

Although your investment in the notes will not result in the ownership or other direct interest in the underlying stocks that comprise the index, the return on your investment in the notes will be subject to certain risks and other factors similar to those associated with direct investments in the sectors and sub-industries represented by the underlying stocks and also will be subject to reduction by the sum of the return on the notional interest rate plus 0.75% per annum (accruing daily). For example, factors affecting companies in the industrials sector include government regulation, funding and spending and competition, both domestically and internationally, including competitive government contract bidding, world events, exchange rates, economic conditions, technological developments, liabilities for environmental damage and general civil liabilities. In addition, factors affecting companies in the information technology sector include rapid changes in technology product cycles, rapid product obsolescence, government regulation, funding and spending and competition, both domestically and internationally, including competitive government contract bidding and competition from foreign competitors with lower production costs. Technology companies are also heavily dependent on patent and intellectual property rights, the loss or impairment of which may adversely affect profitability.

Further, a company's defense-related business may fluctuate significantly from time to time as a result of the start and completion of existing and new contract awards. There are significant risks and uncertainties associated with contracting with the United States or foreign governments that could have a material adverse effect on the business, financial condition and results of operations of a company and, ultimately, the index. Government demand for products and services may fluctuate significantly. In addition, the bidding and awarding process for government contracts is highly competitive. There can be no assurance that any company will continue to be successful in procuring defense contracts from any government. Government contracts could be suspended or terminated at any time, may expire in the future and may not be replaced, which could reduce defense-related sales and be detrimental to a company's business, financial condition and results of operations and, ultimately, the index. The United States government generally has the ability to terminate contracts, in whole or in part, without prior notice, for its convenience or for default based on performance. Contract awards may also be subject to protests by competing bidders, which, if successful, could result in the revocation of any such contract, in whole or in part, and a company's inability to recover amounts expended in anticipation of initiating work under such contract.

Furthermore, defense contracts are subject to complex regulation with burdensome compliance requirements and a failure to comply, even inadvertently, could subject companies to contract termination, civil and criminal penalties, and possibly suspension from future government contracts. For example, United States government contracts and

systems may be subject to audit and review by the Defense Contract Audit Agency and the Defense Contract Management Agency. These agencies review the performance of United States government contractors under such contracts, as well as such contractors' cost structure and compliance with laws and regulations applicable to United States government contractors.

Companies may also be subject to other risks specific to doing business with the United States or foreign governments, including uncertainty of economic conditions, changes in government policies and requirements that may reflect rapidly changing military and political developments, the availability of funds and the ability to meet specified

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performance thresholds. Multi-year contracts with the United States government may be conditioned upon the continued availability of congressional appropriations and are impacted by the uncertainty regarding federal budget pressure. In addition, changes in the way the United States or foreign governments solicit, negotiate, award and manage their contracts may adversely affect a company's existing contracts, awards of new contracts, financial performance and, ultimately, the index. Furthermore, the risks and uncertainties outlined above may change depending on a company's contractual relationship in a given situation (i.e., whether they are selling directly to the government as a prime contractor or acting as a sub-contractor to a prime contractor). In addition, contracting with foreign governments involves special risks. For example, contracts with foreign governments may be terminated or otherwise affected by deteriorating relations with the United States. The impact of any such termination would be adverse to the affected company and the index, and could be severe.

In addition to all of the above, any particular financial or other benefit to a company from the procurement of a government contract may not impact such company, or the index, until after your notes mature. Similarly, the term of any government contract that is procured may be longer than the term of your notes and some or all of the payments under such contract may occur subsequent to the maturity of your notes.

### **The Index May Not Successfully Capture Exposure to Companies That May Benefit From Increased Defense-Related Spending by the United States and Foreign Governments**

The index attempts to track U.S. exchange-listed stocks of companies in six sub-industries within the industrials and information technology sectors that may benefit from increased defense-related spending by the United States and foreign governments, subject to a limitation on volatility. As such, each year the index is rebalanced by calculating a company's exposure to revenue derived from defense-related sales. However, there is no guarantee that the methodology the index sponsor has implemented in order to determine a company's exposure will accurately capture (i) all such companies that have revenue derived from defense-related sales or (ii) the percentage of revenue derived from defense-related sales, which is used in determining a company's initial weight in the base index. In particular, pursuant to the index methodology, revenue is analyzed, and national defense revenue (theme revenue) is determined, in three sub-steps with three different theme revenue tests. However, if revenue is identified in the first sub-step, no review is conducted under the second or third sub-steps, even if additional theme revenue could have been (or would have been) identified in a later sub-step pursuant to its theme revenue test. Similarly, if revenue is not identified in the first sub-step, but is identified in the second sub-step, no review is conducted under the third sub-step, even if additional theme revenue could have been (or would have been) identified in the third sub-step pursuant to its theme revenue test.

Also, the volatility control may limit the index's ability to track the performance of such companies. The index may fail to realize gains that could occur as a result of reducing the exposure of the total return index to stocks that have experienced price volatility. As a result, if market conditions do not represent a continuation of prior observed trends, the level of the index, which is rebalanced into the money market position based on prior volatility trends, may decline. No assurance can be given that the investment methodology used to construct the index will outperform any alternative index that might be constructed from the underlying stocks. The index is different from an investment that seeks long-term exposure to a constant set of underlying stocks.

In addition, pursuant to its methodology and among other rules, the index excludes companies that derive less than 10% of their revenue from defense-related sales.

Furthermore, as a result of the index methodology, a number of the top defense contractors with the United States government may not be included in the index. In particular, the index will exclude:

- large companies that derive significant revenue from defense-related sales, if such revenue does not satisfy the 10% test discussed above, even if their historical defense-related sales would be among the most likely to benefit from increased defense-related spending by the United States and foreign governments and even if the revenue, on a dollar basis, is equal to or greater than revenue from such defense-related sales reported by smaller companies;
- companies in sub-industries and/or sectors outside of the six identified sub-industries within the industrials and information technology sectors (aerospace & defense, construction & engineering, construction machinery & heavy trucks, IT consulting & other services, electronic equipment & instruments and communications equipment), such as defense contractors providing healthcare or housing services;
- private companies, which may include joint ventures between two or more public companies;

foreign companies that are not listed on a U.S. exchange, regardless of whether their common equity is listed on a non-U.S. exchange; and  
other companies not meeting the selection criteria or eligibility screens set forth in the index methodology.

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Further, index market disruption events, particularly during the implementation of annual base index rebalancing, may cause the underlying stocks to be overweighted or underweighted relative to what their weight otherwise would have been and this overweighting or underweighting of underlying stocks will inform an underlying stock's weight in the index until the next annual base index rebalancing. This may further prevent the index from successfully capturing exposure to revenue derived from defense-related sales and also may have an adverse impact on the level of the index. See “ Index Market Disruption Events Could Affect the Level of the Index on Any Date” and “The Index Index Market Disruptions” below.

You should also be aware that, while the index attempts to track U.S. exchange-listed stocks of companies that derive revenue from defense-related sales that may benefit from increased defense-related spending by the United States and foreign governments, any such effect may not occur during the term of the notes. Therefore, even if a company ultimately benefits from increased defense-related spending by the United States and foreign governments, this benefit may not be realized fully, or at all, during the term of the notes.

### The Index May Not Include Companies in the Six Sub-Industries Within the Industrials and Information Technology Sectors That Derive Revenue From Defense-Related Sales

In order for a company to be eligible for inclusion in the index, it must pass a keyword screen, meaning that a company must include in its most recent annual regulatory filing with the Securities and Exchange Commission (i) at least one of the keywords determined by the index sponsor that are associated with mission area categories and key initiatives identified in the most recent Program Acquisition Cost By Weapon System report and Defense Budget Overview published by the United States Department of Defense (together, the “budget reports”) or (ii) the keyword “Department of Defense”. A company that derives revenue from defense-related sales but that fails the keyword screen due to the use of alternative terminology in its annual regulatory filing or other reasons will not be included in the index, even if such company's revenue derived from defense-related sales is significant. Further, even if a company passes the keyword screen and is ultimately included in the index, revenue earned by such company that is derived from defense-related sales may not be included in the calculation of such company's weighting in the index if such revenue is not categorized in certain ways mandated by the index methodology.

### The Index Will Include, and May Heavily Weight, Companies That Report Revenue Derived From Non-Defense Related Sales

The index sponsor identifies companies that report one or more revenue amounts derived from sales to defense organizations or classified as being earned from defense-related sales. A company's weight in the index is based, in part, on its exposure to the national defense theme (the percentage of revenue such company derives from defense-related sales). However, for example, in the case that a revenue amount is (i) earned from a combination of direct or indirect sales to one or more defense organizations and one or more organizations that are not defense organizations or (ii) classified as being earned from a combination of direct or indirect defense-related sales and sales that are not defense-related sales, the entire revenue amount will be attributed to defense-related sales if the company does not otherwise report at least one revenue amount that is earned solely from direct or indirect sales to one or more defense organizations or that is classified as being earned solely from direct or indirect defense-related sales. Once a company's revenue is identified by the index sponsor as theme revenue, such revenue will be used to calculate the company's target weight in the index, regardless of whether all of such revenue is actually derived from defense-related sales. Therefore, a company may be included in the index, and may be heavily weighted, on the basis of, and despite, the related revenue amount having a significant amount derived from non-defense related sales. For example, if a company does not otherwise report at least one revenue amount that is earned solely from direct or indirect sales to one or more defense organizations or that is classified as being earned solely from direct or indirect defense-related sales, but reports a revenue amount earned from sales to both the United States Department of Defense and police forces, the entirety of such revenue amount will be considered national defense revenue (theme revenue) even though the percentage of such revenue amount attributable to the United States Department of Defense is not known to the index sponsor and even though the percentage of such revenue amount not attributable to the United States Department of Defense may be significant. Therefore, a company's weight in the index may be derived from revenue that is not attributable to the national defense theme.

The Budget Reports Used to Determine the Base Index Universe Are Not Expected to Be From the Same Time Period as the Annual Regulatory Filing Used for a Company's Revenue

The index sponsor reviews a company's most recent annual regulatory filing filed with the Securities and Exchange Commission in order to determine such company's index eligibility and weight in the index. Mission area categories and key initiatives identified in the most recent budget reports are used by the index committee to determine specific keywords for the purpose of determining the base index universe. The additional keyword "Department of Defense" is also used by the index committee for this purpose.

The budget reports used to determine the mission category and key initiative keywords to be used for purposes of the keyword screen during a base index rebalancing generally have not been, and are not expected to be, from the same

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period as the revenue period covered by a company's annual regulatory filing. For example, for the June 2016 base index rebalancing day, the budget reports used by the index sponsor analyzed mission area categories and key initiatives with respect to the 2017 fiscal year budget (created in February 2016), whereas, generally, the company annual regulatory filings were for the 2015 fiscal year. Further, if new budget reports are released 14 or fewer index business days before an annual base index rebalancing day, such mission area categories and key initiatives would not be used for purposes of the keyword screen for such base index rebalancing day and instead would be expected to be used on the next following annual base index rebalancing day (i.e., more than a year later). Similarly, if new budget reports are released shortly after an annual base index rebalancing day, such categories and initiatives would be expected to be used in the keyword screen on the next following annual base index rebalancing day (i.e., almost a year later). Therefore, it is likely that the budget reports referenced will always be from a different time period than the revenue information of the companies being analyzed for index inclusion and weighting.

**The Index Weightings May Be Ratably Rebalanced into the Money Market Position on Any or All Days During the Term of the Notes and, Historically, a Very Significant Portion of the Index's Exposure Consistently Has Been Allocated to the Money Market Position**

The index has a daily volatility control feature which can result in a rebalancing between the underlying stocks and the money market position. This has the effect of reducing the exposure of the index to the performance of the underlying stocks by rebalancing a portion of the exposure into the money market position if the annualized historical realized volatility of the underlying stocks for the applicable 20 index business day volatility cap period would otherwise exceed the volatility cap of 7%.

On any index business day, there is no guarantee that the weight of the underlying stocks in the total return index will not be rebalanced into the money market position. Any rebalancing into the money market position will limit your return on the notes. Historically, a very significant portion (up to approximately 92%) of the index's exposure consistently has been allocated to the money market position. See "The Index – Average Allocation Between the Base Index and the Money Market Position for Each Month" below for hypothetical and historical data regarding the index's exposure to the money market position.

In addition, there is no guarantee that the volatility cap will successfully reduce the volatility of the index or avoid any volatile movements of any underlying stock. If there is a rapid and severe decline in the market prices of the underlying stocks, the index may not rebalance into the money market position until the index has declined by a substantial amount.

**The Index Has a Limited Operating History**

The notes are linked to the performance of the index, which was launched on June 1, 2016. Because the index has no index level history prior to that date, limited historical index level information will be available for you to consider in making an independent investigation of the index performance, which may make it difficult for you to make an informed decision with respect to the notes.

The hypothetical performance data prior to the launch of the index on June 1, 2016 refers to simulated performance data. The index sponsor advises that such hypothetical performance data was derived using the index rules as of June 1, 2016, but applied retroactively using historical underlying stock and notional interest rate levels. No future performance of the index can be predicted based on the hypothetical performance data or the historical index performance information described herein.

**Each Underlying Stock's Weight Is Limited by the Weight Constraint and the Daily Volatility Constraint**

Each year, the index sponsor sets the target weights for the underlying stocks based on such stock's exposure to the national defense theme, subject to constraints on the minimum and maximum weight of each underlying stock. The weight constraints could lower your return versus an investment that was not subject to the minimum and maximum weighting allotted to any one underlying stock.

In addition, the index's daily volatility target may result in a very significant portion of the index's exposure being allocated to the money market position. Historically, a very significant portion (up to approximately 92%) of the index's exposure consistently has been allocated to the money market position. The volatility target represents an intended trade-off, in which some potential upside is given up in exchange for attempting to limit downside exposure in volatile markets. However, because the notes provide for the repayment of principal at maturity, the incremental benefit to holders of the notes from the index's volatility target may be limited. In other words, the notes themselves

limit exposure to decreases in the level of the index by providing for a cash settlement amount that will be no less than the face amount of the notes. Due to this feature of the notes, the index's volatility target, which attempts to reduce downside exposure to the underlying stocks, may not be as beneficial as it otherwise may be (including, for example, when used with securities that provide for a cash settlement amount that could be less than the face amount) and the cost of the index's volatility target, which is reflected in part in the above referenced trade-off, may not be desirable to you.

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### Correlation of Performances Among the Underlying Stocks May Reduce the Performance of the Index

Performances of the underlying stocks may become highly correlated from time to time during the term of the notes, including, but not limited to, periods in which there is a substantial decline in a particular sector or sub-industry containing such correlated underlying stocks. High correlation among underlying stocks representing either the industrials or information technology sector, or any of the six sub-industries from such sectors included in the index, during periods of negative returns could have an adverse effect on the level of the index.

### The Selection Criteria Used to Select the Underlying Stocks May Result in Larger Declines in the Value of the Index Than Those Experienced by Other Stock Indices

The index sponsor determines the U.S. exchange listed securities included in the index and their weightings based, in part, on a methodology for identifying those companies that derive revenue from defense-related sales that may benefit from increased defense-related spending by the United States and foreign governments. The metrics used to select the companies may lead to a company being included in the index that ultimately does not have sustainable growth. The index may not perform as well as a broad-based stock index or a stock index selected using different criteria (including a stock index that includes fewer stocks in sub-industries than the index), and as a result the cash settlement amount may be less than it would have been if your notes were linked to a different index. For example, see “The Index – Comparative Performance of the Index and the S&P Aerospace & Defense Select Industry Index” below for hypothetical and historical data regarding the index’s performance relative to the S&P Aerospace & Defense Select Industry Index.

### While the Weight of Each Underlying Stock for Each Annual Rebalancing Will Be Determined on a Single Day (the Base Index Observation Day), the Rebalancing Based on Such Revised Weights Will Be Implemented Over a Base Index Rebalancing Period

For purposes of each annual base index rebalancing, the target weight of each underlying stock will be determined on a related base index observation day. While the target weight of each underlying stock for each annual base index rebalancing will be determined on a single day (i.e., such base index observation day), the rebalancing of the number of shares of each underlying stock based on such revised target weights will be implemented over a base index rebalancing period comprised of five base index rebalancing days, which consist of the day that is three index business days after the applicable base index observation day and the four following index business days, subject to adjustment. As a result, for the first four days of the base index rebalancing period, the composition of the index will contain a mix of underlying stocks, share numbers and weights that is different than the underlying stocks and their respective share numbers and weights at the end of such base index rebalancing period. Therefore, the levels of the index on such days may be lower than such levels would have been if the annual base index rebalancing had been implemented in full in one day, which could have an adverse impact on any payments on, and the value of, your notes and the trading market for your notes. For a discussion of how the index is rebalanced, see “The Index” below.

### Index Market Disruption Events Could Affect the Level of the Index on Any Date

If a base index rebalancing day or a total return index rebalancing day must be effected on an index business day on which an index market disruption event occurs with respect to any underlying stock, the index calculation agent shall then rebalance the index as described in “The Index — Index Market Disruptions” herein.

In particular, if an index market disruption event occurs with respect to an underlying stock on a base index rebalancing day, such affected underlying stock will not be rebalanced based on its target weight during the applicable base index rebalancing period. Instead, the number of shares of such underlying stock will remain the same as the number of shares of such underlying stock on the index business day prior to the base index rebalancing day on which it was first affected by such index market disruption event. The weights of all other underlying stocks not affected by an index market disruption event will be updated such that each underlying stock not affected by an index market disruption event will have a weight within the remaining weight of the base index not allocated to the weight of the underlying stock(s) affected by an index market disruption event that is proportional to its original target weight relative to the original target weights of all other underlying stocks not affected by an index market disruption event. Further, the target weights of the underlying stocks will not be recalculated until the next base index observation day (i.e., a year later).

Thus, an underlying stock that was to have its target weight increased relative to the prior year may not realize an increase to such degree or at all. Similarly, an underlying stock that was to have its target weight decreased relative to

the prior year may not realize a decrease to such degree or at all. In all cases, an index market disruption event will affect the weights of all of the underlying stocks (due to the update made to the weights of all underlying stocks not affected by an index market disruption event through a proportional reallocation of the remaining weight of the base index not allocated to the weight of the underlying stock or underlying stocks affected by an index market disruption event), and may have an adverse impact on the level of the index, potentially for a year until the next annual base index rebalancing.

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Further, if on a base index observation day, a stock that was not included in the index on the previous index business day is affected by an index market disruption event, such stock will be excluded from the index, regardless of its exposure to the national defense theme. Therefore, i