



\$10,000,000
Callable Fixed Rate Notes due June 23, 2032

General

- The notes are unsecured and unsubordinated obligations of JPMorgan Chase & Co. **Any payment on the notes is subject to the credit risk of JPMorgan Chase & Co.**
- These notes are designed for an investor who seeks a fixed income investment at an interest rate of 3.00% per annum but who is also willing to accept the risk that the notes will be called prior to the Maturity Date.
- These notes have a long maturity relative to other fixed income products. Longer-dated notes may be riskier than shorter-dated notes. See "Selected Risk Considerations" in this pricing supplement.
- At our option, we may redeem the notes, in whole but not in part, on any of the Redemption Dates specified below.
- The notes may be purchased in minimum denominations of \$1,000 and in integral multiples of \$1,000 thereafter.

Key Terms

Issuer:	JPMorgan Chase & Co.
Payment at Maturity:	On the Maturity Date, we will pay you the principal amount of your notes <i>plus</i> any accrued and unpaid interest, <i>provided</i> that your notes are outstanding and have not previously been called on any Redemption Date.
Call Feature:	On any of December 23, 2021, December 23, 2022, December 23, 2023, December 23, 2025, December 23, 2026, December 23, 2027, December 23, 2028, December 23, 2029, December 23, 2030 and December 23, 2031 (each, a "Redemption Date"), we may redeem your notes, in whole but not in part, at a price equal to the principal amount being redeemed <i>plus</i> any accrued and unpaid interest, subject to the Business Day Convention and the Interest Accrual Convention described below and in the accompanying product supplement.
Interest:	Subject to the Interest Accrual Convention, with respect to each Interest Period, for each \$1,000 principal amount note, we will pay you interest in arrears on each Interest Payment Date in accordance with the following formula: $\$1,000 \times \text{Interest Rate} \times \text{Day Count Fraction}.$
Interest Period:	The period beginning on and including the Original Issue Date of the notes and ending on but excluding the first Interest Payment Date, and each successive period beginning on and including an Interest Payment Date and ending on but excluding the next succeeding Interest Payment Date, subject to any earlier redemption and the Interest Accrual Convention described below and in the accompanying product supplement
Interest Payment Dates:	Interest on the notes will be payable in arrears on the 23 rd calendar day of June and December of each year, beginning on June 23, 2020 to and including the Maturity Date (each, an "Interest Payment Date"), subject to any earlier redemption and the Business Day Convention and Interest Accrual Convention described below and in the accompanying product supplement.
Interest Rate:	3.00% per annum
Pricing Date:	December 19, 2019
Original Issue Date:	December 23, 2019, subject to the Business Day Convention (Settlement Date)
Maturity Date:	June 23, 2032, subject to the Business Day Convention
Business Day Convention:	Following
Interest Accrual Convention:	Unadjusted
Day Count Fraction:	30/360
CUSIP:	48128GN89

Investing in the notes involves a number of risks. See "Risk Factors" beginning on page PS-18 of the accompanying product supplement and "Selected Risk Considerations" beginning on page PS-4 of this pricing supplement.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of the notes or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying product supplement, prospectus supplement and prospectus. Any representation to the contrary is a criminal offense.

	Price to Public ⁽¹⁾	Fees and Commissions ⁽²⁾	Proceeds to Issuer
Per note	\$1,000	\$12.50	\$987.50
Total	\$10,000,000	\$125,000	\$9,875,000

(1) The price to the public includes the estimated cost of hedging our obligations under the notes through one or more of our affiliates.

(2) J.P. Morgan Securities LLC, which we refer to as JPMS, acting as agent for JPMorgan Chase & Co., will pay all of the selling commissions of \$12.50 per \$1,000 principal amount note it receives from us to other affiliated or unaffiliated dealers. See "Plan of Distribution (Conflicts of Interest)" in the accompanying product supplement.

The notes are not bank deposits, are not insured by the Federal Deposit Insurance Corporation or any other governmental agency and are not obligations of,

Additional Terms Specific to the Notes

You should read this pricing supplement together with the accompanying prospectus, as supplemented by the accompanying prospectus supplement relating to our Series E medium-term notes of which these notes are a part, and the more detailed information contained in the accompanying product supplement. This pricing supplement, together with the documents listed below, contains the terms of the notes and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, fact sheets, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in the “Risk Factors” section of the accompanying product supplement, as the notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before you invest in the notes.

You may access these documents on the SEC website at www.sec.gov as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

- Product supplement no. 1-I dated April 5, 2018:
http://www.sec.gov/Archives/edgar/data/19617/000089109218003346/e78092_424b2.htm
- Prospectus supplement and prospectus, each dated April 5, 2018:
http://www.sec.gov/Archives/edgar/data/19617/000095010318004508/dp87767_424b2-ps.pdf

Our Central Index Key, or CIK, on the SEC website is 19617. As used in this pricing supplement, “we,” “us” and “our” refer to JPMorgan Chase & Co.

Selected Purchase Considerations

- **PRESERVATION OF CAPITAL AT MATURITY OR UPON REDEMPTION** — We will pay you at least the principal amount of your notes if you hold the notes to maturity or to the Redemption Date, if any, on which we elect to call the notes. **Because the notes are our unsecured and unsubordinated obligations, payment of any amount on the notes is subject to our ability to pay our obligations as they become due.**
- **PERIODIC INTEREST PAYMENTS** — The notes offer periodic interest payments on each Interest Payment Date at the Interest Rate, subject to any earlier redemption. Interest, if any, will be paid in arrears on each Interest Payment Date to the holders of record at the close of business on the business day immediately preceding the applicable Interest Payment Date. The interest payments will be based on the Interest Rate listed on the cover of this pricing supplement. The yield on the notes may be less than the overall return you would receive from a conventional debt security that you could purchase today with the same maturity as the notes.
- **POTENTIAL PERIODIC REDEMPTION BY US AT OUR OPTION** — At our option, we may redeem the notes, in whole but not in part, on any of the Redemption Dates set forth on the cover of this pricing supplement, at a price equal to the principal amount being redeemed *plus* any accrued and unpaid interest, subject to the Business Day Convention and the Interest Accrual Convention described on the cover of this pricing supplement and in the accompanying product supplement. Any accrued and unpaid interest on the notes redeemed will be paid to the person who is the holder of record of these notes at the close of business on the business day immediately preceding the applicable Redemption Date. Even in cases where the notes are called before maturity, noteholders are not entitled to any fees or commissions described on the front cover of this pricing supplement.
- **TAX TREATMENT** — The notes will be treated as fixed-rate debt instruments that are expected to be issued without original issue discount for U.S. federal income tax purposes, as described in the section entitled “Material U.S. Federal Income Tax Consequences” in this pricing supplement. You should review that section carefully and consult your tax adviser regarding the U.S. federal income tax consequences of an investment in the notes.
- **INSOLVENCY AND RESOLUTION CONSIDERATIONS** — The notes constitute “loss-absorbing capacity” within the meaning of the final rules (the “TLAC rules”) issued by the Board of Governors of the Federal Reserve System (the “Federal Reserve”) on December 15, 2016 regarding, among other things, the minimum levels of unsecured external long-term debt and other loss-absorbing capacity that certain U.S. bank holding companies, including JPMorgan Chase & Co., are required to maintain. Such debt must satisfy certain eligibility criteria under the TLAC rules. If JPMorgan Chase & Co. were to enter into resolution, either in a proceeding under Chapter 11 of the U.S. Bankruptcy Code or in a receivership administered by the Federal Deposit Insurance Corporation (the “FDIC”) under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”), holders of the notes and other debt and equity securities of JPMorgan Chase & Co. will absorb the losses of JPMorgan Chase & Co. and its affiliates.

Under Title I of the Dodd-Frank Act and applicable rules of the Federal Reserve and the FDIC, JPMorgan Chase & Co. is required to submit periodically to the Federal Reserve and the FDIC a detailed plan (the “resolution plan”) for the rapid and orderly resolution of JPMorgan Chase & Co. and its material subsidiaries under the U.S. Bankruptcy Code and other applicable insolvency laws in the event of material financial distress or failure. JPMorgan Chase & Co.’s preferred resolution strategy under its resolution plan contemplates that only JPMorgan Chase & Co. would enter bankruptcy proceedings under Chapter 11 of the U.S. Bankruptcy Code pursuant to a “single point of entry” recapitalization strategy. JPMorgan Chase & Co.’s subsidiaries would be recapitalized as needed so that they could continue normal operations or subsequently be wound down in an orderly manner. As a result, JPMorgan Chase & Co.’s losses and any losses incurred by its subsidiaries would be imposed first on holders of JPMorgan Chase & Co.’s equity securities and

thereafter on unsecured creditors, including holders of the notes and other securities of JPMorgan Chase & Co. Claims of holders of the notes and those other debt securities would have a junior position to the claims of creditors of JPMorgan Chase & Co.’s subsidiaries and to the claims of priority (as determined by statute) and secured creditors of JPMorgan Chase & Co. Accordingly, in a resolution of JPMorgan Chase & Co. under Chapter 11 of the U.S. Bankruptcy Code, holders of the notes and other debt securities of JPMorgan Chase & Co. would realize value only to the extent available to JPMorgan Chase & Co. as a shareholder of JPMorgan Chase Bank, N.A. and its other subsidiaries and only after any claims of priority and secured creditors of JPMorgan Chase & Co. have been fully repaid. If JPMorgan Chase & Co. were to enter into a resolution, none of JPMorgan Chase & Co., the Federal Reserve or the FDIC is obligated to follow JPMorgan Chase & Co.’s preferred resolution strategy under its resolution plan.

The FDIC has similarly indicated that a single point of entry recapitalization model could be a desirable strategy to resolve a systemically important financial institution, such as JPMorgan Chase & Co., under Title II of the Dodd-Frank Act (“Title II”). Pursuant to that strategy, the FDIC would use its power to create a “bridge entity” for JPMorgan Chase & Co.; transfer the systemically important and viable parts of JPMorgan Chase & Co.’s business, principally the stock of JPMorgan Chase & Co.’s main operating subsidiaries and any intercompany claims against such subsidiaries, to the bridge entity; recapitalize those subsidiaries using assets of JPMorgan Chase & Co. that have been transferred to the bridge entity; and exchange external debt claims against JPMorgan Chase & Co. for equity in the bridge entity. Under this Title II resolution strategy, the value of the stock of the bridge entity that would be redistributed to holders of the notes and other debt securities of JPMorgan Chase & Co. may not be sufficient to repay all or part of the principal amount and interest on the notes and those other securities. To date, the FDIC has not formally adopted a single point of entry resolution strategy, and it is not obligated to follow such a strategy in a Title II resolution of JPMorgan Chase & Co.

Selected Risk Considerations

An investment in the notes involves significant risks. These risks are explained in more detail in the “Risk Factors” section of the accompanying product supplement.

- **WE MAY CALL YOUR NOTES PRIOR TO THEIR SCHEDULED MATURITY DATE** — We may choose to call the notes early or choose not to call the notes early on any Redemption Date in our sole discretion. If the notes are called early, you will receive the principal amount of your notes *plus* any accrued and unpaid interest to, but excluding, the Redemption Date. The aggregate amount that you will receive through and including the Redemption Date will be less than the aggregate amount that you would have received had the notes not been called early. If we call the notes early, your overall return may be less than the yield that the notes would have earned if you held your notes to maturity and you may not be able to reinvest your funds at the same rate as the original notes. We may choose to call the notes early, for example, if U.S. interest rates decrease or do not rise significantly or if volatility of U.S. interest rates decreases significantly.
- **LONGER-DATED NOTES MAY BE RISKIER THAN SHORTER-DATED NOTES** — By purchasing a note with a longer tenor, you are more exposed to fluctuations in interest rates than if you purchased a note with a shorter tenor. The present value of a longer-dated note tends to be more sensitive to rising interest rates than the present value of a shorter-dated note. If interest rates rise, the present value of a longer-dated note will fall faster than the present value of a shorter-dated note. You should purchase these notes only if you are comfortable with owning a note with a longer tenor.
- **CREDIT RISK OF JPMORGAN CHASE & CO.** — The notes are subject to the credit risk of JPMorgan Chase & Co., and our credit ratings and credit spreads may adversely affect the market value of the notes. Investors are dependent on JPMorgan Chase & Co.’s ability to pay all amounts due on the notes. Any actual or potential change in our creditworthiness or credit spreads, as determined by the market for taking our credit risk, is likely to adversely affect the value of the notes. If we were to default on our payment obligations, you may not receive any amounts owed to you under the notes and you could lose your

entire investment.

- **POTENTIAL CONFLICTS** — We and our affiliates play a variety of roles in connection with the issuance of the notes, including acting as calculation agent and as an agent of the offering of the notes and hedging our obligations under the notes. In performing these duties, our economic interests and the economic interests of the calculation agent and other affiliates of ours are potentially adverse to your interests as an investor in the notes. In addition, our business activities, including hedging and trading activities for our own accounts or on behalf of customers, could cause our economic interests to be adverse to yours and could adversely affect any payment on the notes and the value of the notes. It is possible that hedging or trading activities of ours or our affiliates in connection with the notes could result in substantial returns for us or our affiliates while the value of the notes declines. Please refer to “Risk Factors — Risks Relating to Conflicts of Interest” in the accompanying product supplement for additional information about these risks.
- **REINVESTMENT RISK** — If we redeem the notes, the term of the notes may be reduced and you will not receive interest payments after the applicable Redemption Date. There is no guarantee that you would be able to reinvest the proceeds from an investment in the notes at a comparable return and/or with a comparable interest rate for a similar level of risk in the event the notes are redeemed prior to the Maturity Date.
- **CERTAIN BUILT-IN COSTS ARE LIKELY TO AFFECT ADVERSELY THE VALUE OF THE NOTES PRIOR TO MATURITY** — While the payment at maturity described in this pricing supplement is based on the full principal amount of your notes, the original issue price of the notes includes the agent’s commission and the estimated cost of hedging our obligations under the notes through one or more of our affiliates. As a result, the price, if any, at which JPMS will be willing to purchase notes from you in secondary market transactions, if at all, will likely be lower than the original issue price and any sale prior to the Maturity Date could result in a substantial loss to you. This secondary market price will also be affected by a number of factors aside from the agent’s commission and hedging costs, including those referred to under “Many Economic and Market Factors Will Impact the Value of the Notes” below.

The notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your notes to maturity.
- **LACK OF LIQUIDITY** — The notes will not be listed on any securities exchange. JPMS intends to offer to purchase the notes in the secondary market but is not required to do so. Even if there is a secondary market, it may not provide enough liquidity to allow you to trade or sell the notes easily. Because other dealers are not likely to make a secondary market for the notes, the price at which you may be able to trade your notes is likely to depend on the price, if any, at which JPMS is willing to buy the notes.
- **MANY ECONOMIC AND MARKET FACTORS WILL IMPACT THE VALUE OF THE NOTES** — The notes will be affected by a number of economic and market factors that may either offset or magnify each other, including but not limited to:
 - any actual or potential change in our creditworthiness or credit spreads;
 - the time to maturity of the notes;
 - interest and yield rates in the market generally, as well as the volatility of those rates; and
 - the likelihood, or expectation, that the notes will be redeemed by us, based on prevailing market interest rates or otherwise.

Supplemental Use of Proceeds

Notwithstanding anything to the contrary in the accompanying prospectus, we will contribute the net proceeds that we receive from the sale of the notes offered by this pricing supplement to our “intermediate holding company” subsidiary, JPMorgan Chase Holdings LLC, which will use those net proceeds for general corporate purposes. General corporate purposes may include investments in our subsidiaries, payments of dividends to us, extensions of credit to us or our subsidiaries or the financing of possible acquisitions or business expansion. Interest on our debt securities (including interest on the notes offered by this pricing supplement) and dividends on our equity securities, as well as redemptions or repurchases of our outstanding securities, will be made using amounts we receive as dividends or extensions of credit from JPMorgan Chase Holdings LLC or as dividends from JPMorgan Chase Bank, N.A.

Supplemental Terms of the Notes

Payment upon an Event of Default

Notwithstanding anything to the contrary in the accompanying product supplement, for purposes of “General Terms of Notes — Payment upon an Event of Default” in the accompanying product supplement, in case of the acceleration of the notes upon an event of default, any accrued and unpaid interest payable upon acceleration of the notes will be calculated on the basis of a 360-day year and the actual number of days in the adjusted Interest Period and will be based on the Interest Rate.

Material U.S. Federal Income Tax Consequences

Prospective investors should note that the discussion under “Material U.S. Federal Income Tax Consequences” in the accompanying product supplement 1-I does not apply to the notes issued under this pricing supplement and is superseded by the following discussion.

The following is a discussion of the material U.S. federal income and certain estate tax consequences of owning and disposing of the notes, and constitutes the full opinion of our special tax counsel, Davis Polk & Wardwell LLP. It applies to you only if you are an initial investor who purchases a note at its issue price for cash and holds it as a capital asset within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the “Code”).

This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to you in light of your particular circumstances, including alternative minimum tax consequences, the consequences to taxpayers subject to special tax accounting rules under Section 451(b) of the Code, the potential application of the provision of the Code known as the Medicare contribution tax and the different consequences that may apply if you are an investor subject to special treatment under the U.S. federal income tax laws, such as:

- a financial institution;
- a “regulated investment company” as defined in Code Section 851;
- a tax-exempt entity, including an “individual retirement account” or “Roth IRA” as defined in Code Section 408 or 408A, respectively;
- a dealer in securities;
- a person holding a note as part of a “straddle,” conversion transaction or integrated transaction, or who has entered into a “constructive sale” with respect to a note;
- a U.S. Holder (as defined below) whose functional currency is not the U.S. dollar;
- a trader in securities who elects to apply a mark-to-market method of tax accounting; or
- a partnership or other entity classified as a partnership for U.S. federal income tax purposes.

If you are a partnership for U.S. federal income tax purposes, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and your activities.

This discussion is based on the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations as of the date hereof, changes to any of which, subsequent to the date hereof, may affect the tax consequences described herein, possibly with retroactive effect. As the law applicable to the U.S. federal income taxation of instruments such as the notes is technical and complex, the discussion below necessarily represents only a general discussion. Moreover, the effects of any applicable state, local or non-U.S.

tax laws are not discussed. **You should consult your tax adviser concerning the application of U.S. federal income and estate tax laws to your particular situation, as well as any tax consequences arising under the laws of any state, local or non-U.S. jurisdiction.**

Tax Consequences to U.S. Holders

You are a “U.S. Holder” if for U.S. federal income tax purposes you are a beneficial owner of a note that is:

- a citizen or individual resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

Tax Treatment Prior to Maturity

It is expected, and therefore this discussion assumes, that the notes will be issued without original issue discount for U.S. federal income tax purposes. Stated interest on the notes will generally be taxable to you as ordinary interest income at the time it accrues or is received, in accordance with your method of accounting for U.S. federal income tax purposes.

Tax Treatment upon Sale or Exchange

You will recognize capital gain or loss on the sale, exchange or retirement of a note equal to the difference between the amount received (other than amounts received in respect of accrued interest, which will be treated as described under “— Tax Treatment Prior to Maturity”) and your adjusted tax basis in the note. Your gain or loss generally will be long-term capital gain or loss if at the time of the sale, exchange or retirement you held the notes for more than one year, and short-term capital gain or loss otherwise. Long-term capital gains recognized by non-corporate U.S. holders are generally subject to taxation at reduced rates. Any capital loss you recognize may be subject to limitations.

Your adjusted tax basis in a note generally will be equal to your original purchase price for the note.

Tax Consequences to Non-U.S. Holders

You are a “Non-U.S. Holder” if for U.S. federal income tax purposes you are a beneficial owner of a note that is:

- a nonresident alien individual;
- a foreign corporation; or
- a foreign estate or trust.

You are not a “Non-U.S. Holder” for purposes of this discussion if you are an individual present in the United States for 183 days or more in the taxable year of disposition of a note. In this case, you should consult your tax adviser regarding the U.S. federal income tax consequences of the sale or exchange of a note (including early redemption or redemption at maturity).

Subject to the discussion of “FATCA” below, income and gain from a note generally will be exempt from U.S. federal income tax (including withholding tax) if these amounts are not effectively connected with your conduct of a U.S. trade or business and you provide a properly completed applicable Internal Revenue Service (“IRS”) Form W-8 appropriate to your circumstances.

If you are engaged in a U.S. trade or business, and if income or gain from a note is effectively connected with your conduct of that trade or business (and, if an applicable income tax treaty so requires, is attributable to a permanent establishment in the United States), although exempt from the withholding tax discussed above, you generally will be taxed in the same manner as a U.S. Holder with respect to that income. You will not be subject to withholding in this case if you provide a properly completed IRS Form W-8ECI. If this paragraph applies to you, you should consult your tax adviser with respect to other U.S. tax consequences of owning and disposing of notes, including the possible imposition of a 30% branch profits tax if you are a corporation.

Callable Fixed Rate Notes

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Federal Estate Tax

If you are an individual Non-U.S. Holder or an entity the property of which is potentially includible in that individual’s gross estate for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interests or powers), your notes generally will not be treated as U.S.-situs property subject to U.S. federal estate tax, provided that your income from the notes is not then effectively connected with your conduct of a U.S. trade or business.

Backup Withholding and Information Reporting

Interest accrued or paid on your notes and the proceeds received from a sale or exchange of your notes (including early redemption, acceleration or redemption at maturity) will generally be subject to information reporting unless you are an “exempt recipient.” You may also be subject to backup withholding on payments in respect of your notes unless you provide proof of an applicable exemption or a correct taxpayer identification number and otherwise comply with applicable requirements of the backup withholding rules. If you are a Non-U.S. Holder, you will not be subject to backup withholding if you provide a properly completed IRS Form W-8 appropriate to your circumstances. Amounts withheld under the backup withholding rules are not additional taxes and may be refunded or credited against your U.S. federal income tax liability, provided the required information is furnished to the IRS.

FATCA

Legislation commonly referred to as “FATCA,” and regulations promulgated thereunder, generally impose a 30% withholding tax on payments to certain foreign entities (including financial intermediaries) with respect to debt instruments such as the notes, unless various U.S. information reporting and due diligence requirements have been satisfied. An intergovernmental agreement between the United States and the foreign entity’s jurisdiction may modify these requirements. This regime applies to payments of interest and to the payment on your notes at maturity, as well as the proceeds of any sale or other disposition of a note, although under recently proposed regulations (the preamble to which specifies that taxpayers are permitted to rely on them pending finalization), no withholding will apply to payments of gross proceeds (other than any amount treated as interest). You should consult your tax adviser regarding the potential application of FATCA to the notes.

The Issuer will not pay any additional amounts with respect to any withholding tax.

YOU SHOULD CONSULT YOUR TAX ADVISER REGARDING THE TAX CONSEQUENCES OF OWNING AND DISPOSING OF NOTES, INCLUDING THE TAX CONSEQUENCES UNDER STATE, LOCAL, NON-U.S. AND OTHER TAX LAWS AND THE POSSIBLE EFFECTS OF CHANGES IN U.S. FEDERAL OR OTHER TAX LAWS.

Validity of the Notes

In the opinion of Davis Polk & Wardwell LLP, as our special products counsel, when the notes offered by this pricing supplement have been executed and issued by us and authenticated by the trustee pursuant to the indenture, and delivered against payment as contemplated herein, such notes will be our valid and binding obligations, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors’ rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith), *provided* that such counsel expresses no opinion as to the effect of fraudulent conveyance, fraudulent transfer or similar provision of applicable law on the conclusions expressed above. This opinion is given as of the date hereof and is limited to the laws of the State of New York and the General Corporation Law of the State of Delaware. In addition, this opinion is subject to customary assumptions about the trustee’s authorization, execution and delivery of the indenture and its authentication of the notes and the validity, binding nature and enforceability of the indenture with respect to the trustee, all as stated in the letter of such counsel dated March 8, 2018, which was filed as an exhibit to the Registration Statement on Form S-3 by us on March 8, 2018.