Product supplement no. UBS-1-II
To the prospectus dated April 8, 2020 and
the prospectus supplement dated April 8, 2020

Registration Statement Nos. 333-236659 and 333-236659-01
Dated November 4, 2020
Rule 424(b)(2)

JPMorgan Chase & Co.

Notes Linked to One or More Underlying Stocks, Indices or Funds

JPMorgan Chase Financial Company LLC

Notes, Fully and Unconditionally Guaranteed by JPMorgan Chase & Co., Linked to One or More Underlying Stocks, Indices or Funds

General

- Each of JPMorgan Chase & Co. and JPMorgan Chase Financial Company LLC may from time to time offer and sell notes that are linked to one or more Underlying Stocks, Indices or Funds (each, as defined below). Investing in the notes is not equivalent to investing (or taking a short position) directly in any Underlying Stock, Index or Fund or any of the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund.
- The notes issued by JPMorgan Chase & Co. are unsecured and unsubordinated obligations of JPMorgan Chase & Co. **Any payment on the notes issued by JPMorgan Chase & Co. is subject to the credit risk of JPMorgan Chase & Co.**
- The notes issued by JPMorgan Chase Financial Company LLC are unsecured and unsubordinated obligations of JPMorgan Chase Financial Company LLC, the payment on which is fully and unconditionally guaranteed by JPMorgan Chase & Co. **Any payment on the notes issued by JPMorgan Chase Financial Company LLC is subject to the credit risk of JPMorgan Chase Financial Company LLC, as issuer of the notes, and the credit risk of JPMorgan Chase & Co., as guarantor of the notes.**
- This product supplement describes terms that will apply generally to the notes and supplements the terms described in the prospectus supplement and the prospectus. A separate term sheet or pricing supplement, as the case may be, will describe terms that apply to specific issuances of the notes, including any changes to the terms specified below. These term sheets and pricing supplements are referred to generally in this product supplement as terms supplements. A separate underlying supplement or the relevant terms supplement will describe any Index or Fund to which the notes are linked. If the terms described in the relevant terms supplement are inconsistent with those described in this product supplement, any accompanying underlying supplement, the prospectus supplement or the prospectus, the terms described in the relevant terms supplement will govern your notes.
- The notes are not appropriate for all investors and involve a number of risks and important legal and tax consequences that should be discussed with your professional advisers.
- For important information about tax consequences relating to the notes, see "Material U.S. Federal Income Tax Consequences" beginning on page PS-78 of this product supplement.
- The notes will not be listed on any securities exchange unless otherwise specified in the relevant terms supplement.

Key Terms

Issuer:	The issuer of the notes, as specified in the relevant terms supplement, is referred to in this product supplement as the "**Issuer**." The Issuer will be either JPMorgan Chase & Co. or JPMorgan Chase Financial Company LLC.
Guarantor:	For notes issued by JPMorgan Chase Financial Company LLC, JPMorgan Chase & Co., in its capacity as guarantor of those notes, is referred to in this product supplement as the "**Guarantor**."
Underlyings:	Any common stock (each, an "**Underlying Stock**"), index (each, an "**Index**") or fund (each, a "**Fund**") referenced in the determination of any payment on the notes is referred to in this product supplement as an "**Underlying**" and, collectively, as the "**Underlyings**." See "The Underlyings" in this product supplement.
Payments on the Notes:	Any amount payable on the notes will be determined pursuant to the terms set forth in the relevant terms supplement. If the amount of any payment calculated as set forth in the relevant terms supplement is less than zero, the amount of that payment will be $0. *For notes linked in whole or in part to a Commodity Index, the relevant terms supplement will specify that the Issuer may accelerate your notes and adjust the amount of their final payment if a commodity hedging disruption event occurs. See "General Terms of Notes — Consequences of a Commodity Hedging Disruption Event" for additional information.*
Determination Date(s):	The relevant terms supplement will specify each date on which the value of any Underlying is to be referenced in the determination of any payment on the notes (each, a "**Determination Date**"). Unless otherwise specified in the relevant terms supplement, each Determination Date is subject to postponement as described under "General Terms of Notes — Postponement of a Determination Date."
Payment Date(s):	The relevant terms supplement will specify the maturity date and any other date on which amounts will or may be payable on the notes (each, a "**Payment Date**"). Unless otherwise specified in the relevant terms supplement, each Payment Date is subject to postponement as described under "General Terms of Notes — Postponement of a Payment Date."

Investing in the notes involves a number of risks. See "Risk Factors" beginning on page S-2 of the prospectus supplement and "Risk Factors" beginning on page PS-12 of this product 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 the relevant terms supplement, this product supplement, any underlying supplement, the prospectus supplement or the prospectus. Any representation to the contrary is a criminal offense.

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, or guaranteed by, a bank.

J.P.Morgan

November 4, 2020

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The Issuer and the Guarantor (if applicable) have not authorized anyone to provide any information other than that contained or incorporated by reference in the relevant terms supplement, this product supplement, any underlying supplement, the prospectus supplement or the prospectus with respect to the notes offered by the relevant terms supplement and with respect to the Issuer and the Guarantor (if applicable). The Issuer and the Guarantor (if applicable) take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The relevant terms supplement, together with this product supplement, any underlying supplement, the prospectus supplement and the prospectus, will contain the terms of the notes and will supersede 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 the Issuer, or any written materials prepared by any Agent (as defined in "Plan of Distribution (Conflicts of Interest)"), including UBS Financial Services Inc. The information in each of the relevant terms supplement, this product supplement, any underlying supplement, the prospectus supplement and the prospectus may be accurate only as of the date of that document.

The notes are not appropriate for all investors and involve a number of risks and important legal and tax consequences that should be discussed with your professional advisers. You should be aware that the regulations of Financial Industry Regulatory Authority, Inc., or FINRA, and the laws of certain jurisdictions (including regulations and laws that require brokers to ensure that investments are suitable for their customers) may limit the availability of the notes. The relevant terms supplement, this product supplement, any underlying supplement, the prospectus supplement and the prospectus do not constitute an offer to sell or a solicitation of an offer to buy the notes under any circumstances in which that offer or solicitation is unlawful.

The notes are not commodity futures contracts or swaps and are not regulated under the Commodity Exchange Act of 1936, as amended (the "**Commodity Exchange Act**"). If the notes are linked in whole or in part to a Commodity Index (as defined below), the notes are offered pursuant to an exemption from regulation under the Commodity Exchange Act, commonly known as the hybrid instrument exemption, that is available to securities that have one or more payments indexed to the value, level or rate of one or more commodities, as set out in section 2(f) of that statute. Accordingly, you are not afforded any protection provided by the Commodity Exchange Act or any regulation promulgated by the Commodity Futures Trading Commission.

In this product supplement, "JPMorgan Financial" refers to JPMorgan Chase Financial Company LLC.

RISK FACTOR SUMMARY

Your investment in the notes will involve certain risks. Set forth below is only a summary of the principal risks associated with an investment in the notes. ***You should refer to the more detailed discussion of these and other risks set forth under "Risk Factors" in this product supplement, as well as the discussion of risks included in the relevant terms supplement and any accompanying underlying supplement, before you decide that an investment in the notes is appropriate for you.***

Risks Relating to the Notes Generally

- The notes differ from conventional debt securities and may not pay interest or return your principal.
- The notes are subject to the credit risks of JPMorgan Financial and/or JPMorgan Chase & Co.
- As a finance subsidiary, JPMorgan Financial has no independent operations and has limited assets.
- JPMorgan Financial-issued notes will not benefit from any cross-default or cross-acceleration to other debt; a covenant default or bankruptcy, insolvency or reorganization event with respect to the Guarantor does not constitute an event of default with respect to JPMorgan Financial-issued notes.
- The appreciation potential of the notes may be limited.
- If the notes are redeemed early or accelerated, you will be exposed to reinvestment risk and may receive less than the market value of the notes.
- The notes are designed to be held to maturity and secondary trading may be limited.
- You will have no ownership rights in any Underlying or any of the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund.
- Concentration risks may adversely affect the value of the notes.
- For notes linked in whole or in part to a Commodity Index, if a commodity hedging disruption event occurs, the Issuer may accelerate your notes and adjust the amount of their final payment.
- The notes are not regulated by the Commodity Futures Trading Commission.
- Regulatory developments and investigations may result in changes to the rules or methodology used to determine the value of an Underlying, which may adversely affect any payment on the notes.
- Market disruptions or suspensions may adversely affect your return.
- The tax consequences of an investment in the notes are uncertain.

Risks Relating to Conflicts of Interest

- The Issuer, the Guarantor (if applicable) or their affiliates may have interests that are adverse to those of the holders of the notes.

Risks Relating to the Estimated Value and Secondary Market Prices of the Notes

- The estimated value of the notes will be lower than the original issue price of the notes, and secondary market prices of the notes will be impacted by many economic and market factors.

Risks Relating to Basket Notes

- The Basket Underlyings may not be equally weighted.
- Changes in the values of the Basket Underlyings may not be correlated and may offset each other, or changes in value may be correlated in a manner that adversely affects any payment on the notes.

Risks Relating to Least Performing Underlying Notes and Greatest Performing Underlying Notes

- You are exposed to the risks associated with each Underlying.
- Any payment on the notes may be determined by reference to the performance of the Underlying that will result in the worst performance of the notes.

Risks Relating to Relative Performance Notes

- The return on the notes is based on the relative performance of the Underlyings.
- Changes in the values of the Underlyings may be partially offset or entirely negated by each other.
- You are exposed to the risks associated with each Underlying.

Risks Relating to an Underlying Stock

- The Issuer and the Guarantor (if applicable) have no affiliation with any Underlying Stock issuer.
- ADS-linked notes will be subject to currency exchange risk.
- Non-U.S. equity security- or ADS-linked notes will be subject to non-U.S. securities market risk.
- There are important differences between the rights of holders of ADSs and the foreign common stock.
- In some circumstances, the payment you receive on the notes may be based on the common stock(s) (or ADSs, as applicable) of one or more companies that are not the applicable Underlying Stock(s).
- Anti-dilution protection is limited and may be discretionary.

Risks Relating to an Index

- An Index sponsor may adjust an Index without any obligation to consider your interests.
- The reported level of an Index may include the deduction of index fees or other adjustments.
- Unless otherwise specified, to the Issuer's and the Guarantor's (if applicable) knowledge, their securities are not currently included in an Index.

Risks Relating to a Fund

- The policies of the investment adviser or commodity pool operator, as applicable, for a Fund, and the sponsor of its Underlying Index, if applicable, could adversely affect the notes.
- There are risks associated with a Fund, including management risks.
- The anti-dilution protection is limited.
- If a Fund is designed to track an Underlying Index, the performance and market value of that Fund, particularly during periods of market volatility, may not correlate with the performance of its Underlying Index as well as the net asset value per share of the Fund.

Risks Relating to a Non-U.S. Index or a Non-U.S. Fund

- If the prices of the non-U.S. components of a Non-U.S. Index or Non-U.S. Fund are not converted into U.S. dollars for purposes of calculating the value of that Index or Fund, any amount payable on the notes will not be adjusted for changes in exchange rates that might affect that Index or Fund.
- If the prices of the non-U.S. components of a Non-U.S. Index or Non-U.S. Fund are converted into U.S. dollars for purposes of calculating the value of that Index or Fund, the notes will be subject to currency exchange risk.
- An investment in the notes is subject to risks associated with non-U.S. securities markets.

Risks Relating to a Bond Index or a Bond Fund

- Notes linked in whole or in part to a Bond Index or Bond Fund are subject to significant risks associated with fixed-income securities, including interest rate-related risks and credit risks.
- The value of a Bond Index or Bond Fund may be influenced by unpredictable changes in the local governments and economies of the local governments of the issuers of the relevant bonds.

Risks Relating to a Commodity Index or a Commodity Fund

- Commodity futures contracts are subject to legal and regulatory regimes that may change in ways that could adversely affect the notes.
- Commodity or futures contract prices may change unpredictably, and futures contract prices may be near zero, zero or negative, in each case adversely affecting the notes.
- An investment in the notes may not offer direct exposure to physical commodities.
- Changes in the margin requirements for commodity futures contracts may adversely affect the notes.
- A Commodity Index or a Commodity Fund may be subject to pronounced risks of pricing volatility.
- Changes in future prices of commodity futures contracts relative to their current prices may lead to a decrease in any payment on the notes.
- The prices of commodities are volatile and are affected by numerous factors, including sector risks.

DESCRIPTION OF NOTES

The following description of the terms of the notes supplements the description of the general terms of the debt securities set forth under the headings "Description of Notes" in the prospectus supplement and "Description of Debt Securities" in the prospectus. The term "note" refers to each Principal Amount (as defined below) of the Issuer's Notes Linked to One or More Underlying Stocks, Indices or Funds.

General

The issuer of the notes, as specified in the relevant terms supplement, is referred to in this product supplement as the "**Issuer**." The Issuer will be either JPMorgan Chase & Co. or JPMorgan Chase Financial Company LLC, which is referred to in this product supplement as "**JPMorgan Financial**." For notes issued by JPMorgan Chase Financial Company LLC, JPMorgan Chase & Co., in its capacity as guarantor of those notes, is referred to in this product supplement as the "**Guarantor**."

The notes issued by JPMorgan Chase & Co. are unsecured and unsubordinated obligations of JPMorgan Chase & Co. and will rank *pari passu* with all of JPMorgan Chase & Co.'s other unsecured and unsubordinated obligations. **Any payment on the notes issued by JPMorgan Chase & Co. is subject to the credit risk of JPMorgan Chase & Co.**

The notes issued by JPMorgan Financial are unsecured and unsubordinated obligations of JPMorgan Financial, the payment of which is fully and unconditionally guaranteed by JPMorgan Chase & Co. The notes will rank *pari passu* with all of JPMorgan Financial's other unsecured and unsubordinated obligations. JPMorgan Chase & Co.'s guarantee of the notes will rank *pari passu* with all of JPMorgan Chase & Co.'s other unsecured and unsubordinated obligations. **Any payment on the notes issued by JPMorgan Financial is subject to the credit risk of JPMorgan Financial, as issuer of the notes, and the credit risk of JPMorgan Chase & Co., as guarantor of the notes.**

The notes issued by JPMorgan Chase & Co. are a series of debt securities issued by JPMorgan Chase & Co. referred to in the prospectus supplement and the prospectus and will be issued by JPMorgan Chase & Co. under an indenture dated May 25, 2001, as may be amended or supplemented from time to time, between JPMorgan Chase & Co. and Deutsche Bank Trust Company Americas (formerly Bankers Trust Company), as trustee.

The notes issued by JPMorgan Financial are a series of debt securities issued by JPMorgan Financial referred to in the prospectus supplement and the prospectus and will be issued by JPMorgan Financial under an indenture dated February 19, 2016, as may be amended or supplemented from time to time, among JPMorgan Financial, the Guarantor and Deutsche Bank Trust Company Americas, as trustee.

The notes will be represented by one or more permanent global notes registered in the name of The Depository Trust Company, or DTC, or its nominee, as described under "Description of Notes — Forms of Notes" in the prospectus supplement and "Forms of Securities — Book-Entry System" in the prospectus.

This product supplement describes terms that will apply generally to the notes and supplements the terms described in the prospectus supplement and the prospectus. A separate term sheet or pricing supplement, as the case may be, will describe terms that apply to specific issuances of the notes, including any changes to the terms specified below. These term sheets and pricing supplements are referred to generally in this product supplement as terms supplements. A separate underlying supplement or the relevant terms supplement will describe any Index or Fund (each, as defined below) to which the notes are linked. If the terms described in the relevant terms supplement are inconsistent with those described in this product supplement, any accompanying underlying supplement, the prospectus supplement or the prospectus, the terms described in the relevant terms supplement will govern your notes.

The notes will be issued in minimum denominations specified in the relevant terms supplement, and the principal amount of each note (the “**Principal Amount**”) and the original issue price of each note will be specified in the relevant terms supplement.

Subject to applicable law (including, without limitation, U.S. federal laws), the Issuer or its affiliates may, at any time and from time to time, attempt to purchase outstanding notes by tender, in the open market or by private agreement.

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, or guaranteed by, a bank.

The Underlying(s)

The notes will be linked to one or more common stocks (each, an “**Underlying Stock**”), indices (each, an “**Index**”) or funds (each, a “**Fund**”) as specified in the relevant terms supplement. Any Underlying Stock, Index or Fund referenced in the determination of any payment on the notes is referred to in this product supplement as an “**Underlying**” and, collectively, as the “**Underlyings**.” See “The Underlyings” below for additional information.

The relevant terms supplement will specify the manner in which the Underlying(s) will be referenced in the determination of any payment on the notes. Payments on the notes may reflect long (or bullish) exposure to one or more Underlyings (meaning that an increase in the value of the relevant Underlying(s) would generally be expected to have a positive effect on payments on the notes) and/or short (or bearish) exposure to one or more Underlyings (meaning that a decrease in the value of the relevant Underlying(s) would generally be expected to have a positive effect on payments on the notes).

In addition, the notes may be Single Underlying Notes, Basket Notes, Least Performing Underlying Notes, Greatest Performing Underlying Notes or Relative Performance Notes or the relevant terms supplement may specify that, in the determination of any payments on the notes, the Underlyings will be referenced in a manner that does not directly correspond with any of these types of notes.

Single Underlying Notes. “**Single Underlying Notes**” reference the performance of a single Underlying in the determination of one or more payments on the notes.

Basket Notes. “**Basket Notes**” reference the performance of a weighted basket composed of two or more Underlyings (a “**Basket**”) in the determination of one or more payments on the notes.

Least Performing Underlying Notes. “**Least Performing Underlying Notes**” reflect long (or bullish) exposure to the Underlying with the lowest performance out of the Underlyings specified in the relevant terms supplement in the determination of one or more payments on the notes. Payments on Least Performing Underlying Notes will generally be determined by reference to the performance of the Underlying that would result in the worst performance of the notes.

Greatest Performing Underlying Notes. “**Greatest Performing Underlying Notes**” reflect short (or bearish) exposure to the Underlying with the highest performance out of the Underlyings specified in the relevant terms supplement in the determination of one or more payments on the notes. Payments on Greatest Performing Underlying Notes will generally be determined by reference to the performance of the Underlying that would result in the worst performance of the notes.

*Relative Performance Notes. “***Relative Performance Notes**” reference the relative performance of two or more Underlyings, with long exposure to one or more Underlyings (each, a “**Long Underlying**”) and short exposure to one or more other Underlying(s) (each, a “**Short Underlying**”), in the determination of one or more payments on the notes.

Terms Relating to Valuation of the Underlying(s)

The relevant terms supplement will specify the manner in which the initial value, the final value and, if applicable, the strike value of Underlying(s) will be determined. The relevant terms sheet will also specify the manner in which values of the Underlying(s) will be used in the determination of any payment on the notes.

Initial Value. The relevant terms supplement will specify the manner in which the initial value of any Underlying will be determined. For example, with respect to any Underlying, the relevant terms supplement may specify that the initial value of that Underlying will be determined by reference to the value of that Underlying on the pricing date or on multiple dates near the beginning of the term of the notes or may specify that the initial value will be equal to a fixed value. Unless otherwise specified in the relevant terms supplement, the initial value of any Underlying will be determined near the beginning of the term of the notes and will be used in determining the performance of that Underlying or as a reference point against which later values of that Underlying will be compared.

Final Value. The relevant terms supplement will specify the manner in which the final value of any Underlying with respect to any day will be determined. For example, with respect to any Underlying, the relevant terms supplement may specify that the final value of that Underlying will be determined by reference to the value of that Underlying on that day or on multiple dates during the term of the notes. Unless otherwise specified in the relevant terms supplement, the final value of any Underlying with respect to any day will be determined after the determination of the initial value and will be used in determining the performance of that Underlying or as a reference point to be compared to the initial value of that Underlying or to other values specified in the relevant terms supplement.

Strike Value. The relevant terms supplement may specify a value to be used instead of, or in addition to, the initial value of an Underlying to be used in determining the performance of that Underlying or as a reference point against which later values of that Underlying will be compared. If applicable, the relevant terms supplement will specify the manner in which the strike value of any Underlying will be determined. For example, with respect to any Underlying, the relevant terms supplement may specify a fixed value for the strike value of that Underlying or may specify that the strike value of that Underlying will be equal to a specified percentage of the initial value of that Underlying.

Determination Dates. The relevant terms supplement will specify each date on which the value of any Underlying is to be referenced in the determination of any payment on the notes (each, a "**Determination Date**"). Unless otherwise specified in the relevant terms supplement, each Determination Date is subject to postponement as described under "General Terms of Notes — Postponement of a Determination Date" below.

See "The Underlyings" in this product supplement for a description of how the value of each Underlying will be determined. Each Underlying and the value of each Underlying are subject to adjustment under certain circumstances. See "General Terms of Notes — Postponement of a Determination Date" and "The Underlyings" below for additional information.

Additional Terms Relating to Underlyings

In this product supplement, the following terms are used in connection with the Underlyings.

American Depositary Shares. As used in this product supplement, the term "**common stock**" includes securities issued through depositary arrangements that represent non-U.S. equity securities, such as American depositary shares, or ADSs. If an Underlying Stock is an ADS, references to the "issuer" of that Underlying Stock refer to the issuer of the shares underlying the ADS.

Bond Fund. A Fund that is designed to track a bond index or that invests primarily in debt securities is referred to in this product supplement as a "**Bond Fund**."

Bond Index. An Index that is designed to track debt securities is referred to in this product supplement as a "**Bond Index**."

Commodity Fund. A Fund that is designed to track a commodity index or that invests primarily in commodities or commodity futures contracts is referred to in this product supplement as a "**Commodity Fund**."

Commodity Index. An Index that is designed to track commodity futures contracts is referred to in this product supplement as a "**Commodity Index**."

Equity Index. An Index that is designed to track equity securities is referred to in this product supplement as an "**Equity Index**."

Non-U.S. Fund. A Fund that invests primarily in securities issued by non-U.S. companies is referred to in this product supplement as a "**Non-U.S. Fund**."

Non-U.S. Index. An Index that is designed to track primarily securities issued by non-U.S. companies is referred to in this product supplement as a "**Non-U.S. Index**."

Underlying Index. An index tracked by a Fund (or a successor fund, if applicable) is referred to in this product supplement as an "**Underlying Index**."

Underlying ADS Stock. The common stock represented by an ADS is referred to in this product supplement as an "**Underlying ADS Stock**."

Payments on the Notes

Any amount payable on the notes will be determined pursuant to the terms set forth in the relevant terms supplement. If the amount of any payment calculated as set forth in the relevant terms supplement is less than zero, the amount of that payment will be $0. *Any payment on the notes is subject to the credit risks of the Issuer and, with respect to notes issued by JPMorgan Financial, the Guarantor.*

For notes linked in whole or in part to a Commodity Index, the relevant terms supplement will specify that the Issuer may accelerate your notes and adjust the amount of their final payment if a commodity hedging disruption event occurs. See "General Terms of Notes — Consequences of a Commodity Hedging Disruption Event" for additional information.

The relevant terms supplement will specify the maturity date and any other date on which amounts will or may be payable on the notes (each, a "**Payment Date**"). Unless otherwise specified in the relevant terms supplement, each Payment Date is subject to postponement as described under "General Terms of Notes — Postponement of a Payment Date" below.

The "**calculation agent**" or "**note calculation agent**" is the agent appointed by the Issuer to make certain calculations with respect to the notes, which, unless otherwise specified in the relevant terms supplement, will be J.P. Morgan Securities LLC ("**JPMS**"). See "General Terms of Notes — Calculation Agent" below. JPMS is an affiliate of the Issuer and, with respect to notes issued by JPMorgan Financial, the Guarantor and, accordingly, may have interests adverse to yours. Please see "Risk Factors — Risks Relating to Conflicts of Interest — The Issuer, the Guarantor (if applicable) or their affiliates may have economic interests that are adverse to those of the holders of the notes due to JPMS's role as calculation agent."

The Issuer will irrevocably deposit with DTC no later than the opening of business on the applicable date or dates funds sufficient to make payments of the amount, if any, payable with respect to the notes on the applicable date or dates. The Issuer will give DTC irrevocable instructions and authority to pay the applicable amount to the holders of the notes entitled thereto.

Interest Payments

If the relevant terms supplement specifies that the notes will bear periodic interest, the notes will pay interest in arrears at the per annum rate, or such other rate or rates, including rates that reference the performance of the Underlying(s), as specified in the relevant terms supplement. The relevant terms supplement may also specify that the payment of interest is contingent on the performance of the Underlying(s).

Unless otherwise specified in the relevant terms supplement, the interest payment due on each interest payment date specified in the relevant terms supplement for each note, if payable under the terms specified in the relevant terms supplement, will be calculated as follows:

Principal Amount × Interest Rate × 1 / number of interest payment dates per year

where the number of interest payment dates per year is determined by the frequency of the interest payment dates and how many interest payment dates would occur over the course of a full year regardless of the actual term of the notes.

If the payment of interest is not contingent on the performance of the Underlying(s), interest will accrue from and including the issue date of the notes to but excluding the maturity date or the date on which the notes are redeemed or repurchased early, if applicable. Unless otherwise specified in the relevant terms supplement, interest will be payable in arrears on each interest payment date to and including the maturity date or the date on which the notes are redeemed or repurchased early, if applicable, to the holders of record at the close of business on the business day prior to that interest payment date.

Payment upon Early Redemption, Acceleration or Early Repurchase

The relevant terms supplement may specify that the notes will be subject to early redemption or acceleration or that investors may submit a request for the Issuer to repurchase the notes. **No further payments will be made on the notes after they have been redeemed early, accelerated or repurchased early.**

Optional Redemption. If the relevant terms supplement specifies that the notes include an optional redemption feature, the Issuer will have the right, at its election, to redeem the notes in whole but not in part on any of the dates specified in the relevant terms supplement for a cash payment that will be determined as set forth in the relevant terms supplement. If the Issuer intends to redeem your notes, the Issuer will deliver notice to DTC, as holder of the notes, at least such number of business days specified in the relevant terms supplement prior to the date on which the notes are to be redeemed.

Automatic Redemption. If the relevant terms supplement specifies that the notes include an automatic redemption feature, the notes will be automatically redeemed under the circumstances set forth in the relevant terms supplement for a cash payment that will be determined as set forth in the relevant terms supplement on a Payment Date specified in the relevant terms supplement.

Acceleration. If the relevant terms supplement specifies that the notes include an acceleration feature, the maturity date and the determination of the payment at maturity will be accelerated under the circumstances set forth in the relevant terms supplement and in the manner set forth in the relevant terms supplement.

Early Repurchase. If the relevant terms supplement specifies that the notes include an early repurchase feature, you may submit a request to have the Issuer repurchase your notes, subject to the procedures and terms set forth below. **Any repurchase request that the Issuer accepts in accordance with the procedures and terms set forth below will be irrevocable. While the Issuer intends to accept all requests for early repurchase of notes that comply with the procedures and**

terms set forth below, it is not obligated to accept any repurchase request. The Issuer is not committed to purchasing any note at any particular time or price.

Unless otherwise specified in the relevant terms supplement, to request that the Issuer repurchase your notes, you must instruct your broker or other person through which you hold your notes to take the following steps:

- Send a notice of repurchase, substantially in the form attached as Annex A to the relevant terms supplement (a "**Repurchase Notice**"), to the Issuer via email at dln_repurchase@jpmchase.com by no later than 4:00 p.m., New York City time, on the business day prior to the relevant Determination Date. The subject line of the email should include the title of the notes and the CUSIP for those notes. The Issuer or its affiliate must acknowledge receipt of the Repurchase Notice on the same business day for it to be effective, which acknowledgment will be deemed to evidence its acceptance of your repurchase request;

- Instruct your DTC custodian to book a delivery versus payment trade with respect to your notes on the relevant Determination Date at a price equal to the amount payable upon early repurchase of the notes; and

- Cause your DTC custodian to deliver the trade as booked for settlement via DTC at or prior to 10:00 a.m., New York City time, on the day on which the notes will be repurchased.

Different brokerage firms may have different deadlines for accepting instructions from their customers. Accordingly, you should consult the brokerage firm through which you own your interest in the notes in respect of those deadlines. Unless otherwise specified in the relevant terms supplement, if the Issuer does not receive your Repurchase Notice by 4:00 p.m. on the business day prior to the relevant Determination Date OR the Issuer (or its affiliates) does not acknowledge receipt of the Repurchase Notice on the same day, your Repurchase Notice will not be effective, and the Issuer will not repurchase your notes. Once given, a Repurchase Notice may not be revoked.

The calculation agent will, in its sole discretion, resolve any questions that may arise as to the validity of a Repurchase Notice and the timing of receipt of a Repurchase Notice or as to whether and when the required deliveries have been made. Questions about the repurchase requirements should be directed to dln_repurchase@jpmchase.com.

Payment at Maturity

The relevant terms supplement will specify the manner in which any payment at maturity will be determined. **You may lose some or all of your principal amount at maturity.**

For notes issued by JPMorgan Chase & Co. linked to one or more References Stocks, the relevant terms supplement may specify that the payment at maturity will consist of the delivery of a predetermined number of shares of an Underlying Stock (or the cash value of those shares), which is referred to in this product supplement as the "**Physical Delivery Amount**." **The market value of shares delivered as the Physical Delivery Amount (or the cash value of those shares) may be less than your principal amount and may be zero.**

Notes that may permit the delivery of the Physical Delivery Amount at maturity are referred to in this product supplement as "**Physically Settled Notes**." ***JPMorgan Financial does not currently intend to issue Physically Settled Notes.***

No Fractional Shares. If the Issuer delivers shares of an Underlying Stock to you at maturity or if the Issuer delivers Exchange Property (as defined in "The Underlyings — Underlying Stocks — Reorganization Events — The Exchange Property") that includes shares, the Issuer will pay cash in lieu of delivering any fractional shares in an amount equal to the product of the closing price of one of those shares on the final Determination Date *times* the applicable fractional amount, unless otherwise specified in the relevant terms supplement.

Delivery of Shares or Exchange Property. The Issuer may designate any of its affiliates to deliver any shares of an Underlying Stock or any Exchange Property pursuant to the terms of the notes, and the Issuer will be discharged of any obligation to deliver those shares or that Exchange Property to the extent of that performance by its affiliates. References in this product supplement to delivery of shares of an Underlying Stock or any Exchange Property by the Issuer will be deemed to include delivery of those shares or that Exchange Property by its affiliates.

ESTIMATED VALUE AND SECONDARY MARKET PRICES OF THE NOTES

The Estimated Value of the Notes

Unless otherwise specified in the relevant terms supplement, the estimated value of the notes when the terms of the notes are set, which is referred to as the estimated value of the notes, will be set forth on the cover of the relevant terms supplement and will be equal to the sum of the values of the following hypothetical components: (1) a fixed-income debt component with the same maturity as the notes, valued using the internal funding rate described below, and (2) the derivative or derivatives underlying the economic terms of the notes. The estimated value of the notes will not represent a minimum price at which JPMS would be willing to buy your notes in any secondary market (if any exists) at any time.

For notes issued by JPMorgan Chase & Co. or JPMorgan Financial, the internal funding rate used in the determination of the estimated value of the notes will be the Issuer's internal funding rate for structured debt, which will generally represent a discount from the credit spreads for JPMorgan Chase & Co.'s conventional fixed-rate debt. This internal funding rate may differ from the market-implied funding rate for vanilla fixed income instruments of a similar maturity issued by JPMorgan Chase & Co. or its affiliates. Any difference may be based on, among other things, the Issuer's and its affiliates' view of the funding value of the notes as well as the higher issuance, operational and ongoing liability management costs of the notes in comparison to those costs for the conventional fixed income instruments of JPMorgan Chase & Co. This internal funding rate is based on certain market inputs and assumptions, which may prove to be incorrect, and is intended to approximate the prevailing market replacement funding rate for the notes. The use of an internal funding rate and any potential changes to that rate may have an adverse effect on the terms of the notes and any secondary market prices of the notes. For additional information, see "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes —The estimated value of the notes will be derived by reference to an internal funding rate and will not be determined by reference to credit spreads for JPMorgan Chase & Co.'s conventional fixed income instruments" below in this product supplement.

The value of the derivative or derivatives underlying the economic terms of the notes will be derived from internal pricing models of the Issuer's affiliates. These models are dependent on inputs such as the traded market prices of comparable derivative instruments and on various other inputs, some of which are market-observable, and which can include volatility, correlation, dividend rates, interest rates and other factors, as well as assumptions about future market events and/or environments. Accordingly, the estimated value of the notes will be determined when the terms of the notes are set based on market conditions and other relevant factors and assumptions existing at that time. See "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes — The estimated value of the notes will not represent future values of the notes and may differ from others' estimates" below in this product supplement.

Unless otherwise specified in the relevant terms supplement, the estimated value of the notes will be lower than the original issue price of the notes because costs associated with selling, structuring and hedging the notes will be included in the original issue price of the notes. These costs include the selling commissions, referral fees, if any, and structuring fees, if any, paid to JPMS and/or other affiliated or unaffiliated dealers, the projected profits, if any, that the Issuer's affiliates expect to realize for assuming risks inherent in hedging its obligations under the notes and the estimated cost of hedging its obligations under the notes. Because hedging the Issuer's obligations entails risk and may be influenced by market forces beyond its control, this hedging may result in a profit that is more or less than expected, or it may result in a loss. The Issuer or one or more of its affiliates will retain any profits realized in hedging the Issuer's obligations under the notes unless a portion of the hedging profits is allowed to other affiliated or unaffiliated dealers. Under those circumstances, the Issuer or one or more of its affiliates will retain any remaining hedging profits. See "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes — The estimated value of the notes will be lower than the original issue price (price to public) of the notes" below in this product supplement.

Secondary Market Prices of the Notes

For information about factors that will impact any secondary market prices of the notes, see "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes — Secondary market prices of the notes will be impacted by many economic and market factors" below in this product supplement. In addition, the relevant terms supplement may specify that the Issuer will generally expect some of the costs included in the original issue price of the notes to be partially paid back to you in connection with any repurchases of your notes by JPMS in an amount that will decline to zero over an initial predetermined period that will be specified in the relevant terms supplement. The length of any such initial period will reflect the structure of the notes, whether the Issuer's affiliates expect to earn a profit in connection with the Issuer's hedging activities, the estimated costs of hedging the notes and when these costs are incurred, all as determined by JPMS. See "Risk Factors — Risks Relating to the Estimated Value and Secondary Market Prices of the Notes — The value of the notes as published by JPMS (and which may be reflected on customer account statements) may be higher than the then-current estimated value of the notes for a limited time period" below in this product supplement.

RISK FACTORS

Your investment in the notes will involve certain risks. Unless otherwise specified in the relevant terms supplement, the notes do not pay interest and do not guarantee any return of principal at, or prior to, maturity. Investing in the notes is not equivalent to investing (or taking a short position) directly in any Underlying Stock, Index or Fund or any of the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund. In addition, your investment in the notes entails other risks not associated with an investment in conventional debt securities. ***You should consider carefully the following discussion of risks, as well as the discussion of risks included in the relevant terms supplement and any accompanying underlying supplement, before you decide that an investment in the notes is appropriate for you.***

Risks Relating to the Notes Generally

The notes differ from conventional debt securities and may not pay interest or return any of your principal amount.

Any amount payable on the notes will be determined pursuant to the terms set forth in the relevant terms supplement. The notes will not pay interest unless specified in the relevant terms supplement. You may lose some or all of your principal amount at maturity. In addition, for Physically Settled Notes, the market value of shares delivered as the Physical Delivery Amount (or the cash value of those shares) may be less than your principal amount and may be zero.

The notes issued by JPMorgan Chase & Co. are subject to the credit risk of JPMorgan Chase & Co.

The notes issued by JPMorgan Chase & Co. are subject to the credit risk of JPMorgan Chase & Co., and its credit ratings and credit spreads may adversely affect the market value of the notes. Investors in notes issued by JPMorgan Chase & Co. are dependent on its ability to pay all amounts due on the notes. Any actual or potential change in JPMorgan Chase & Co.'s creditworthiness or the credit spreads, as determined by the market for taking JPMorgan Chase & Co.'s credit risk, is likely to affect adversely the value of the notes. Any payment on the notes issued by JPMorgan Chase & Co. is subject to its creditworthiness. If JPMorgan Chase & Co. were to default on its payment obligations, you may not receive any amounts owed to you under the notes and you could lose your entire investment.

The notes issued by JPMorgan Financial are subject to the credit risks of JPMorgan Financial and the Guarantor.

The notes issued by JPMorgan Financial are subject to the credit risk of JPMorgan Financial, as issuer of the notes, and the credit risk of JPMorgan Chase & Co., as guarantor of the notes. JPMorgan Financial's and the Guarantor's credit ratings and credit spreads may adversely affect the market value of the notes. Investors in notes issued by JPMorgan Financial are dependent on its ability and on the ability of the Guarantor to pay all amounts due on the notes. Any actual or potential change in JPMorgan Financial's or the Guarantor's creditworthiness or the credit spreads, as determined by the market for taking that credit risk, is likely to affect adversely the value of the notes. Any payment on the notes issued by JPMorgan Financial is subject to its creditworthiness and the creditworthiness of the Guarantor. If JPMorgan Financial and the Guarantor were to default on their payment obligations, you may not receive any amounts owed to you under the notes and you could lose your entire investment.

As a finance subsidiary, JPMorgan Financial has no independent operations and has limited assets.

As a finance subsidiary of JPMorgan Chase & Co., JPMorgan Financial has no independent operations beyond the issuance and administration of its securities. Aside from the initial capital contribution from JPMorgan Chase & Co., substantially all of the assets of JPMorgan Financial are expected to relate to obligations of one or more of its affiliates to make payments under loans made by JPMorgan Financial or under other intercompany agreements with JPMorgan Financial. As a result, JPMorgan Financial's ability to make payments in respect of the notes is limited. JPMorgan Financial is dependent upon payments from one or more of its affiliates under intercompany loans and other intercompany agreements to meet its obligations under the notes it issues. If these affiliates do not make payments to JPMorgan Financial and JPMorgan Financial fails to make payments on the notes, holders of the notes may have to seek payment under the related guarantee by JPMorgan Chase & Co. and that guarantee will rank *pari passu* with all other unsecured and unsubordinated obligations of JPMorgan Chase & Co.

Notes issued by JPMorgan Financial will not have the benefit of any cross-default or cross-acceleration with other indebtedness of JPMorgan Financial or the Guarantor; a covenant default or bankruptcy, insolvency or reorganization event with respect to the Guarantor does not constitute an event of default with respect to notes issued by JPMorgan Financial.

Unless otherwise stated in the applicable terms supplement, the notes issued by JPMorgan Financial will not have the benefit of any cross-default or cross-acceleration with other indebtedness of JPMorgan Financial or the Guarantor. In addition, a covenant default by the Guarantor, or an event of bankruptcy, insolvency or reorganization of the Guarantor, does not constitute an event of default with respect to any notes issued by JPMorgan Financial.

The appreciation potential of the notes may be limited.

The relevant terms supplement may specify that the return or payment at maturity on the notes in excess of the principal amount will not exceed a specified value. Under these circumstances, the appreciation potential of the notes will be limited to that specified value, regardless of the performance of the Underlying(s). In addition, if the relevant terms supplement specifies that the notes will or may pay interest, the appreciation potential of the notes may be limited to any interest payments, regardless of the performance of the Underlying(s).

The Issuer, the Guarantor (if applicable) or their affiliates may have interests that are adverse to those of the holders of the notes.

The Issuer, the Guarantor (if applicable) or their affiliates may have interests that are adverse to those of the holders of the notes. See "— Risks Relating to Conflicts of Interest" below.

If the notes are redeemed early or accelerated, you will be exposed to reinvestment risk.

The term of the notes may be limited by any optional or automatic redemption or acceleration feature set forth in the relevant terms supplement. No further payments will be made on the notes after they have been redeemed early or accelerated. If the notes are redeemed early or accelerated, the term of your investment in the notes will be limited to a period that is shorter than the original term of the notes. There is no guarantee that you would be able to reinvest the proceeds from an investment in the notes at a comparable return for a similar level of risk in the event that the notes are redeemed early or accelerated.

The payment upon an early redemption or acceleration may be substantially less than the market value of the notes.

If the notes include an optional or automatic redemption or acceleration feature, the notes may be redeemed early or accelerated at a time when prevailing interest rates are relatively low or at a time when the performance of the Underlying(s) has caused the value of the notes to increase substantially since issuance. Accordingly, any payment upon early redemption or acceleration determined in the manner set forth in the relevant terms supplement may be substantially less than the market value of the notes.

If the relevant terms supplement provides for early repurchases at the option of the holders, there will be restrictions on your ability to request that the Issuer repurchase your notes.

Unless otherwise specified in the relevant terms supplement, if you elect to request that the Issuer repurchase your notes, your request will be valid only if the Issuer receives your Repurchase Notice by 4:00 p.m., New York City time, on the business day prior to the relevant Determination Date and the Issuer (or its affiliates) acknowledges receipt of the Repurchase Notice that same day (which will evidence its acceptance of your repurchase request). If the Issuer does not receive that notice or the Issuer (or its affiliates) does not acknowledge receipt of that notice (which means that the Issuer has declined to accept your repurchase request), your repurchase request will not be effective and the Issuer will not repurchase your notes.

Because of the timing requirements of the Repurchase Notice (and the Issuer's acknowledgment of receipt), settlement of the repurchase will be prolonged when compared to a sale and settlement in the secondary market. As your request that the Issuer repurchase your notes is irrevocable, this will subject you to market risk in the event that the market fluctuates after the Issuer receives your request. Furthermore, if the Issuer accepts your repurchase request, its obligation to repurchase the notes prior to maturity may be postponed upon the occurrence of a market disruption event.

If the relevant terms supplement provides for early repurchases at the option of the holders, you will not know the amount you will receive upon an early repurchase at the time you elect to request that the Issuer repurchase your notes.

You will not know the amount payable upon early repurchase at the time you elect to request that the Issuer repurchase your notes. As a result, you will be exposed to market risk in the event that the market fluctuates after the Issuer accepts your repurchase request and prior to the date on which the payment you will receive upon repurchase is determined.

If you receive shares of an Underlying Stock at maturity, the value of those shares may be less on the maturity date than on the final Determination Date.

For Physically Settled Notes, the market value of shares delivered as the Physical Delivery Amount may be less than your principal amount on the final Determination Date and could decrease further during the period between the final Determination Date and the maturity date. The Issuer will make no adjustments to the Physical Delivery Amount to account for any fluctuations in the value of the shares to be delivered at maturity, and you will bear the risk of any decrease in the value of those shares between the final Determination Date and the maturity date.

The values of the Underlying(s) will be referenced only on the Determination Date(s) for purposes of determining any payment on the notes.

The relevant terms supplement will specify each Determination Date on which the value of any Underlying is to be referenced in the determination of any payment on the notes. The value of the notes and any payment on the notes may be adversely affected by referencing the values of the Underlying(s) only on Determination Dates. For example, for notes that provide for a single payment at maturity based on the long (or bullish) performance of an Underlying, as measured from the pricing date to a single Determination Date near the end of the term of the notes, if the value of that Underlying increases or remains relatively constant during the initial term of the notes and then decreases below the initial value of that Underlying, the final value of that Underlying may be significantly less than if it were calculated on a date earlier than the Determination Date. Under these circumstances, you may receive a lower return on the notes than you would have received if you had invested directly in any Underlying Stock, Index or Fund, the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund or any exchange-traded or over-the-counter instruments based on any of the foregoing.

The estimated value of the notes will be lower than the original issue price (price to public) of the notes, and secondary market prices of the notes will be impacted by many economic and market factors.

The estimated value of the notes will be lower than the original issue price (price to public) of the notes, and secondary market prices of the notes will be impacted by many economic and market factors. See "— Risks Relating to the Estimated Value and Secondary Market Prices of the Notes" below.

The notes are designed to be held to maturity.

The notes are not designed to be short-term trading instruments. The price at which you will be able to sell your notes to the Issuer or its affiliates prior to maturity, if at all, may be at a substantial discount from the principal amount of the notes, even in cases where any Underlying to which the notes provide long (or bullish) exposure has appreciated from its initial value (or its strike value, if applicable) and/or any Underlying to which the notes provide short (or bearish) exposure has depreciated from its initial value (or its strike value, if applicable). The potential returns described in the relevant terms supplement assume that your notes are held to maturity unless redeemed or repurchased early or accelerated, if applicable.

Secondary trading may be limited.

Unless otherwise specified in the relevant terms supplement, the notes will not be listed on any securities exchange. There may be little or no secondary market for the notes. Even if there is a secondary market for the notes, it may not provide enough liquidity to allow you to trade or sell the notes easily.

JPMS may act as a market-maker for the notes, but is not required to do so. Because the Issuer does not expect that other market-makers will participate significantly in the 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. If at any time JPMS or another agent does not act as a market-maker, it is likely that there would be little or no secondary market for the notes.

If the value of an Underlying changes, the market value of your notes may not change proportionately.

Owning the notes is not the same as investing (or taking a short position) directly in any Underlying Stock, Index or Fund or any of the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund. Accordingly, changes in the value of an Underlying may not result in a proportionate change in the market value of the notes. For example, for notes that provide long (or bullish) exposure to an Underlying, if the value of that Underlying on any day has increased, the value of the notes may not increase comparably, if at all. It is possible for the value of that Underlying to increase moderately while the value of those notes declines.

You will have no ownership rights in any Underlying Stock, Index or Fund or any of the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund.

Investing in the notes is not equivalent to investing (or taking a short position) directly in any Underlying Stock, Index or Fund or any of the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund, the Underlying ADS Stock underlying an Underlying Stock that is an ADS or exchange-traded or over-the-counter instruments based on any of the foregoing. As an investor in the notes, you will not have any ownership interests or rights in any of the foregoing.

Concentration risks may adversely affect the value of the notes.

If any payment on the notes will be based on the performance of a single Underlying Stock, Index or Fund or on a small number of Underlying Stocks, Indices or Funds that are concentrated in a single or a limited number of industry or commodity sectors or geographical regions, you will not benefit, with respect to the notes, from the advantages of a diversified investment, and you will bear the risks of a concentrated investment, including the risk of greater volatility than may be experienced in connection with a diversified investment. You should be aware that other investments may be more diversified than the notes in terms of the number and variety of industry or commodity sectors or geographical regions.

For notes linked in whole or in part to a Commodity Index, the relevant terms supplement will specify that, if a commodity hedging disruption event occurs, the Issuer may accelerate your notes and adjust the amount of their final payment.

For notes linked in whole or in part to a Commodity Index, upon the occurrence of legal or regulatory changes that the calculation agent determines have interfered with the Issuer's or its affiliates' ability to hedge its obligations under the notes, or if for any other reason the Issuer or its affiliates are unable to enter into or maintain hedge positions that the calculation agent deems necessary to hedge the Issuer's obligations under the notes, the Issuer may, in its sole and absolute discretion, accelerate the payment on your notes and pay you an amount determined in good faith and in a commercially reasonable manner by the calculation agent. If a commodity hedging disruption event occurs and the Issuer decides to exercise its right to accelerate the payment on your notes, your investment may result in a loss and you may not be able to reinvest the proceeds in a comparable investment. See "General Terms of Notes — Consequences of a Commodity Hedging Disruption Event" and "— Risks Relating to a Commodity Index or a Commodity Fund — The commodity futures contracts underlying a Commodity Index or a Commodity Fund are subject to legal and regulatory regimes that may change in ways that could have a substantial adverse effect on the value of the notes and, for notes linked to a Commodity Index, could lead to the early acceleration of your notes" below.

The notes are not regulated by the Commodity Futures Trading Commission (the "CFTC").

The net proceeds to be received by the Issuer from the sale of the notes will not be used to purchase or sell any futures contracts or options on futures contracts for your benefit. An investment in the notes thus does not constitute either an investment in futures contracts or options on futures contracts or an investment in a collective investment vehicle that trades in these futures contracts (*i.e.*, the notes will not constitute a direct or indirect investment by you in the futures contracts), and you will not benefit from the regulatory protections of the CFTC. Among other things, this means that the Issuer and the Guarantor (if applicable) are not registered with the CFTC as a futures commission merchant and you will not benefit from the CFTC's or any other non-U.S. regulatory authority's regulatory protections afforded to persons who trade in futures contracts on a regulated futures exchange through a registered futures commission merchant. For example, the price you pay to purchase notes will be used by the Issuer for its own purposes and will not be subject to customer funds segregation requirements provided to customers that trade futures on an exchange regulated by the CFTC.

Unlike an investment in the notes, an investment in a collective investment vehicle that invests in futures contracts on behalf of its participants may be subject to regulation as a commodity pool, and its operator may be required to register with and be regulated by the CFTC as a commodity pool operator, or qualify for an exemption from the registration requirement. Because the notes will not be interests in a commodity pool, the notes will not be regulated by the CFTC as a commodity pool, the Issuer and the Guarantor (if applicable) will not be registered with the CFTC as a commodity pool operator and you will not benefit from the CFTC's or any non-U.S. regulatory authority's regulatory protections afforded to persons who invest in regulated commodity pools.

Regulatory developments and investigations may result in changes to the rules or methodology used to determine the value of an Underlying, which may adversely affect any payment on the notes.

The methodologies used to determine the value of certain "benchmarks," which may include one or more Underlyings, are the subject of recent national, international and other regulatory guidance, proposals for reform and investigations. These reforms or changes made in response to these investigations may cause those benchmarks to perform differently than in the past and may have other consequences that cannot be predicted. In addition, market participants may elect not to continue to participate in the administration of certain benchmarks if these reforms and investigations increase the costs and risks associated with those activities, which could cause changes in the rules or methodologies used in certain benchmarks or lead to the disappearance of certain benchmarks. Any of these changes could adversely affect the value of the notes and any payment on the notes.

Market disruptions may adversely affect your return.

The calculation agent may, in its sole discretion, determine that the markets have been affected in a manner that prevents it from determining the value of any Underlying on any Determination Date and the amount of any payment on the notes. These events may include disruptions or suspensions of trading in the markets as a whole. If the calculation agent, in its sole discretion, determines that any of these events prevents the Issuer or any of its affiliates from properly hedging the Issuer's obligations under the notes, it is possible that one or more Determination Dates and Payment Dates will be postponed and that your return will be adversely affected. Market disruption events are defined in the relevant sections of "The Underlyings" below. In addition, if any Determination Date is postponed to the last possible day and the value of any Underlying is not available on that day because of a market disruption event or because that date is not a trading day, the calculation agent will nevertheless determine the value of that Underlying on that last possible day. See "General Terms of Notes — Postponement of a Determination Date" and "General Terms of Notes — Postponement of a Payment Date" for more information.

The tax consequences of an investment in the notes are uncertain.

There is no direct legal authority as to the proper U.S. federal income tax treatment of the notes, and the Issuers do not intend to request a ruling from the Internal Revenue Service (the "**IRS**") regarding the notes. The IRS might not accept, and a court might not uphold, the Issuer's treatment of the notes, in which case the timing and/or character of income on the notes could be affected materially and adversely. The relevant terms supplement will describe the tax treatment of a particular offering of notes. You should review carefully the section entitled "Material U.S. Federal Income Tax Consequences" in this product supplement and consult your tax adviser regarding the U.S. federal income tax consequences of an investment in the notes, including possible alternative treatments.

Historical performance of any Underlying should not be taken as an indication of the future performance of that Underlying during the term of the notes.

The actual performance of any Underlying over the term of the notes, as well as any payment on the notes, may bear little relation to the historical performance of that Underlying. The future performance of any Underlying may differ significantly from its historical performance, and no assurance can be given as to the value of any Underlying during the term of the notes, including on any Determination Date. It is impossible to predict whether the value of any Underlying will rise or fall. There is no assurance that the performance of the Underlying(s) will not adversely affect any payment on the notes.

Employees of JPMorgan Chase & Co. or one of its affiliates, including JPMorgan Financial, holding the notes must comply with policies that limit their ability to purchase or sell the notes.

If you are an employee of JPMorgan Chase & Co. or one of its affiliates, including JPMorgan Financial, you may acquire the notes only for investment purposes, and you must comply with all of JPMorgan Chase & Co.'s internal policies and procedures. Because these policies and procedures limit the dates and times that you may transact in the notes, you may not be able to purchase the notes from the Issuer, and your ability to trade or sell the notes in the secondary market may be limited.

Risks Relating to Conflicts of Interest

The Issuer's offering of the notes does not constitute an expression of its views (or the Guarantor's views, if applicable) about, or a recommendation of, any Underlying Stock, Index or

Fund or the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund.

You should not take the Issuer's offering of the notes as an expression of its views (or the Guarantor's views, if applicable) about how any Underlying Stock, Index or Fund or the securities, commodities, futures contracts or other assets or market measures underlying any Index or Fund will perform in the future or as a recommendation to invest (directly or indirectly, by taking a long or short position) in any of the foregoing, including through an investment in the notes. As a global financial institution, the Issuer, the Guarantor (if applicable) and their affiliates may, and often do, have positions (long, short or both) in one or more of the foregoing that conflict with an investment in the notes. See "—The Issuer, the Guarantor (if applicable) or their affiliates may have economic interests that are adverse to those of the holders of the notes as a result of their hedging and other trading activities" below and "Use of Proceeds and Hedging" in this product supplement for some examples of potential conflicting positions the Issuer may have. You should undertake an independent determination of whether an investment in the notes is appropriate for you in light of your specific investment objectives, risk tolerance and financial resources.

The Issuer, the Guarantor (if applicable) or their affiliates may have economic interests that are adverse to those of the holders of the notes as a result of their hedging and other trading activities.

In anticipation of the sale of the notes, the Issuer expects to hedge its obligations under the notes through certain affiliates or unaffiliated counterparties by taking positions in one or more Underlying Stocks or Funds, the securities, commodities, futures contracts or other assets underlying the Indices and the Funds or related currency exchange rates or instruments the value of which is derived from one or more Underlying Stocks, Indices or Funds, the securities, commodities, futures contracts or other assets or market measures underlying one or more Indices or Funds or related currency exchange rates. The Issuer may also adjust its hedge by, among other things, purchasing or selling any of the foregoing at any time and from time to time and close out or unwind its hedge by selling any of the foregoing on or before any Determination Date. In addition, JPMS and other affiliates of the Issuer or the Guarantor (if applicable) also trade the foregoing on a regular basis (taking long or short positions or both), for their accounts, for other accounts under their management and to facilitate transactions, including block transactions, on behalf of customers. While the Issuer cannot predict an outcome, any of these hedging or other trading activities could potentially affect the value of the Underlying(s) and may adversely affect the value of the notes or any payment on the notes. See "Use of Proceeds and Hedging" below for additional information about the Issuer's hedging activities.

This hedging and trading activity may present a conflict of interest between your interests as a holder of the notes and the interests of the Issuer's affiliates in hedging and other trading activities. These hedging and trading activities could also affect the price at which JPMS is willing to purchase your notes in the secondary market. In addition, the Issuer's hedging counterparties expect to make a profit. Because hedging the Issuer's obligations entails risk and may be influenced by market forces beyond its control, this hedging may result in a profit that is more or less than expected, or it may result in a loss. It is possible that these hedging or trading activities could result in substantial returns for the Issuer or its affiliates while the value of the notes declines.

The Issuer, the Guarantor (if applicable) or their affiliates may have economic interests that are adverse to those of the holders of the notes as a result of their business activities.

The Issuer, the Guarantor (if applicable) or their affiliates may currently or from time to time engage in business with the issuer of an Underlying Stock or companies the securities of which are included in an Index, held by a Fund or included in a relevant Underlying Index (the "**underlying companies**"), including extending loans to, making equity investments in or providing advisory services to the underlying companies, including merger and acquisition advisory services. The Issuer and the Guarantor (if applicable) do not make any representation or warranty to any purchaser of notes with respect to any matters whatsoever relating to its business with the underlying companies.

In addition, in the course of the Issuer's or the Guarantor's (if applicable) business, it or its affiliates may acquire nonpublic information about one or more Underlying Stocks, Indices or Funds or the securities, commodities, futures contracts or other assets or market measures underlying one or more Indices or Funds or currency exchange rates relating to any of the foregoing, and the Issuer will not disclose any such information to you.

Furthermore, the Issuer, the Guarantor (if applicable) or one of their affiliates may serve as issuer, agent or underwriter for issuances of other securities or financial instruments with returns linked or related to changes in the value of an Underlying Stock, an Index or a Fund or the securities, commodities, futures contracts or other assets or market measures underlying an Index or Fund. To the extent that the Issuer, the Guarantor (if applicable) or one of their affiliates serves as issuer, agent or underwriter for these securities or financial instruments, the Issuer, the Guarantor (if applicable) or their affiliate's interests with respect to these securities or financial instruments may be adverse to those of the holders of the notes. By introducing competing products into the marketplace in this manner, the Issuer, the Guarantor (if applicable) or one or more of their affiliates could adversely affect the value of the notes.

The value of one or more Underlyings may be determined in whole or in part by reference to the value of a benchmark that is established based on quotes, prices, values or other data provided by market participants, including, in some cases, the Issuer, the Guarantor (if applicable) or their affiliates. In addition, the Issuer, the Guarantor (if applicable) or their affiliates may take part in, or have a supervisory role in connection with, the administration of certain benchmarks. The Issuer, the Guarantor (if applicable) and their affiliates will have no obligation to consider your interests as a holder of the notes in taking any actions that might affect the value of any Underlying or the notes.

The Issuer, the Guarantor (if applicable) or their affiliates may have economic interests that are adverse to those of the holders of the notes due to JPMS's role as calculation agent.

JPMS, one of the Issuer's and the Guarantor's (if applicable) affiliates, will act as the calculation agent. The calculation agent makes all necessary calculations and determinations in connection with the notes, including with respect to any payments on the notes and the assumptions used to determine the pricing and estimated value of the notes. In performing these duties, JPMS may have interests adverse to the interests of the holders of the notes, which may affect your return on the notes, particularly where JPMS, as the calculation agent, is entitled to exercise discretion. See "General Terms of Notes — Postponement of a Determination Date" and "The Underlyings" in this product supplement.

JPMS and its affiliates may have published research, expressed opinions or provided recommendations that are inconsistent with investing in or holding the notes or that may adversely affect the value of the notes, and may do so in the future.

JPMS and its affiliates may publish research reports, express opinions or provide recommendations from time to time that relate to one or more Underlying Stocks, Indices or Funds, the securities, commodities, futures contracts or other assets underlying one or more Indices and the Funds or currency exchange rates relating to any of the foregoing. These research reports, opinions or recommendations may be inconsistent with purchasing or holding the notes and could adversely affect the value of the notes. Any research, opinions or recommendations expressed by JPMS or its affiliates may not be consistent with each other and may be modified from time to time without notice. Investors should make their own independent investigation of the merits of investing in the notes and any Underlying to which the notes are linked.

Risks Relating to the Estimated Value and Secondary Market Prices of the Notes

The estimated value of the notes will be lower than the original issue price (price to public) of the notes.

The estimated value of the notes is only an estimate determined by reference to several factors. Unless otherwise specified in the relevant terms supplement, the original issue price of the notes will exceed the estimated value of the notes because costs associated with selling, structuring and hedging the notes are included in the original issue price of the notes. These costs include the selling commissions, referral fees, if any, structuring fees, if any, the projected profits, if any, that the Issuer's affiliates expect to realize for assuming risks inherent in hedging its obligations under the notes and the estimated cost of hedging its obligations under the notes. See "Estimated Value and Secondary Market Prices of the Notes — The Estimated Value of the Notes" above in this product supplement.

The estimated value of the notes will not represent future values of the notes and may differ from others' estimates.

The estimated value of the notes will be determined by reference to the internal pricing models of one or more of the Issuer's affiliates when the terms of the notes are set. This estimated value of the notes will be based on market conditions and other relevant factors existing at that time and assumptions about market parameters, which can include volatility, correlation, dividend rates, interest rates and other factors. Different pricing models and assumptions could provide valuations for notes that are greater than or less than the estimated value of the notes. In addition, market conditions and other relevant factors may change after the estimated value of the notes has been determined, and any assumptions may prove to be incorrect. The value of the notes could change significantly after the estimated value of the notes has been determined based on, among other things, changes in market conditions, the Issuer's or the Guarantor's (if applicable) creditworthiness, interest rate movements and other relevant factors, which may impact the price, if any, at which JPMS would be willing to buy notes from you in secondary market transactions. See "Estimated Value and Secondary Market Prices of the Notes — The Estimated Value of the Notes" above in this product supplement.

The estimated value of the notes will be derived by reference to an internal funding rate and will not be determined by reference to credit spreads for JPMorgan Chase & Co.'s conventional fixed income instruments.

The internal funding rate used in the determination of the estimated value of the notes will generally represent a discount from the credit spreads for JPMorgan Chase & Co.'s conventional fixed income instruments. This internal funding rate may differ from the market-implied funding rate for vanilla fixed income instruments of a similar maturity issued by JPMorgan Chase & Co. or its affiliates. Any difference may be based on, among other things, the Issuer's and its affiliates' view of the funding value of the notes as well as the higher issuance, operational and ongoing liability management costs of the notes in comparison to those costs for the conventional fixed income instruments of JPMorgan Chase & Co. This internal funding rate is based on certain market inputs and assumptions, which may prove to be incorrect, and is intended to approximate the prevailing market replacement funding rate for the notes. If the interest rate implied by JPMorgan Chase & Co.'s conventional fixed income credit spreads were used, the Issuer would expect the economic terms of the notes to be more favorable to you. In addition, the estimated value of the notes might be lower if it were based on the interest rate implied by JPMorgan Chase & Co.'s conventional fixed income credit spreads. Consequently, the use of an internal funding rate and any potential changes to that rate may have an adverse effect on the terms of the notes and any secondary market prices of the notes. See "Estimated Value and Secondary Market Prices of the Notes — The Estimated Value of the Notes" above in this product supplement.

The value of the notes as published by JPMS (and which may be reflected on customer account statements) may be higher than the then-current estimated value of the notes for a limited time period.

The relevant terms supplement may specify that the Issuer will generally expect that some of the costs included in the original issue price of the notes will be partially paid back to you in connection with any repurchases of your notes by JPMS in an amount that will decline to zero over an initial predetermined period. These costs can include selling commissions and structuring fees, if any, projected hedging profits, if any, and, in some circumstances, estimated hedging costs and the Issuer's internal secondary market funding rates for structured debt issuances. See "Estimated Value and Secondary Market Prices of the Notes — Secondary Market Prices of the Notes" above in this product supplement. Accordingly, the estimated value of your notes during this initial period may be lower than the value of the notes as published by JPMS (and which may be shown on your customer account statements).

Secondary market prices of the notes will likely be lower than the original issue price of the notes.

Any secondary market prices of the notes will likely be lower than the original issue price of the notes because, among other things, secondary market prices take into account the Issuer's internal secondary market funding rates for structured debt issuances, and, also, because secondary market prices (a) exclude referral fees, if any, and structuring fees, if any, and (b) may exclude selling commissions, projected hedging profits, if any, and estimated hedging costs that are included in the original issue price of the notes. As a result, the price, if any, at which JPMS will be willing to buy notes from you in secondary market transactions, if at all, is likely to be lower than the original issue price. Any sale by you prior to the maturity date could result in a substantial loss to you. See the immediately following risk factor for information about additional factors that will impact any secondary market prices of the notes.

Secondary market prices of the notes will be impacted by many economic and market factors.

The secondary market price of the notes during their term will be impacted by a number of economic and market factors, which may either offset or magnify each other, aside from the selling commissions, referral fees, if any, and structuring fees, if any, projected hedging profits, if any, estimated hedging costs and the value of the Underlying(s), including:

- any actual or potential change in the Issuer's creditworthiness or credit spreads and, for notes issued by JPMorgan Financial, the Guarantor's creditworthiness or credit spreads;
- customary bid-ask spreads for similarly sized trades;
- the Issuer's internal secondary market funding rates for structured debt issuances;
- the actual and expected frequency and magnitude of changes in the value of any Underlying (*i.e.*, volatility);
- prevailing market prices, volatility and liquidity of any option or futures contracts relating to any Underlying;
- the time to maturity of the notes;
- the dividend rate on an Underlying Stock or on the equity securities underlying an Index or a Fund (while not paid to holders of the notes, dividend payments on an Underlying Stock or on any equity securities underlying an Index or a Fund may influence the value of the Underlying(s) and the market value of options on the Underlying(s) and therefore affect the market value of the notes);
- the occurrence of certain corporate events to the shares of an Underlying Stock that may or may not require an adjustment to the applicable Stock Adjustment Factor or, in the case of an

Underlying Stock that is a non-U.S. equity security or an ADS, the selection of a Successor Foreign Underlying Stock or a Successor Underlying Stock, as applicable;

- the occurrence of certain events to the shares of a Fund that may or may not require an adjustment to the applicable Share Adjustment Factor;
- supply and demand trends and market prices at any time for the commodities underlying the futures contracts that compose any Commodity Index or Commodity Fund;
- interest and yield rates in the market generally, as well as in the markets of an Underlying Stock and the markets of the securities, commodities, futures contracts or other assets or market measures underlying an Index or a Fund;
- economic, financial, political, regulatory and judicial events that affect an Underlying Stock, the securities underlying an Index or a Fund or stock markets generally;
- economic, financial, political, regulatory, geographical, agricultural, meteorological or judicial events that affect a Commodity Index or a Commodity Fund or commodity markets generally;
- for notes linked to two or more Underlyings, changes in correlation (the extent to which the values of the Underlyings increase or decrease to the same degree at the same time) between the Underlyings; and
- the exchange rates and the volatility of the exchange rates between the U.S. dollar and the currencies in which an Underlying ADS Stock (with respect to an Underlying Stock that is an ADS) or the equity securities underlying a Non-U.S. Index or a Non-U.S. Fund are traded, and, if a Non-U.S. Index or a Non-U.S. Fund is calculated in one currency and the equity securities underlying that Non-U.S. Index or Non-U.S. Fund are traded in one or more other currencies, the correlation between those rates and the value of that Non-U.S. Index or Non-U.S. Fund.

Additionally, independent pricing vendors and/or third party broker-dealers may publish a price for the notes, which may also be reflected on customer account statements. This price may be different (higher or lower) than the price of the notes, if any, at which JPMS may be willing to purchase your notes in the secondary market.

Some or all of these factors will influence the price you will receive if you choose to sell your notes prior to maturity. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from another factor or factors. You may have to sell your notes at a substantial discount from the principal amount.

Risks Relating to Basket Notes

The Underlyings included in a Basket may not be equally weighted.

If so specified in the relevant terms supplement, the Underlyings included in a Basket may have different weights in determining the value of the Basket. For example, the relevant terms supplement may specify that the Basket consists of five Underlyings and that the weights of the Underlyings are 25%, 30%, 15%, 20% and 10%. One consequence of an unequal weighting of the Underlyings is that the same percentage change in two of the Underlyings may have different effects on the value of the Basket. For example, if the weight for Underlying A is greater than the weight for Underlying B, a 5% decrease in the value of Underlying A will have a greater effect on the value of the Basket than a 5% decrease in the value of Underlying B.

The weights of the Underlyings included in a Basket may be determined on a date other than the pricing date.

If so specified in the relevant terms supplement, the weights of the Underlyings included in a Basket may be determined on a date or dates other than the pricing date. For example, the relevant terms supplement may specify that the weights of the Underlyings will be determined based on the relative magnitude of the return of each Underlying as of the final Determination Date. As a result, if the relevant terms supplement so specifies, you will not know the weight assigned to each Underlying until a date later than the pricing date, and you may not know the weight assigned to each Underlying in the Basket prior to the final Determination Date.

Changes in the values of the Underlyings included in a Basket may not be correlated and may offset each other, or changes in value may be correlated in a manner that adversely affects any payment on the notes.

Movements in the values of the Underlyings included in a Basket may not be correlated with each other. For notes that provide long (or bullish) exposure to the Basket, at a time when the value of one or more of the Underlyings increases, the value of the other Underlyings may not increase as much or may even decline. Therefore, in calculating the performance of the Basket, increases in the value of one or more of the Underlyings may be moderated, or more than offset, by lesser increases or declines in the value of the other Underlying or Underlyings, particularly if the Underlying or Underlyings that appreciate are of relatively low weight in the Basket. In addition, high correlation of movements in the values of the Underlyings during periods of negative returns among the Underlyings could have an adverse effect on any payment on the notes.

Similarly, for notes that provide short (or bearish) exposure to the Basket, at a time when the value of one or more of the Underlyings decreases, the value of the other Underlyings may not decrease as much or may even increase. Therefore, in calculating the performance of the Basket, declines in the value of one or more of the Underlyings may be moderated, or more than offset, by lesser declines or increases in the value of the other Underlying or Underlyings, particularly if the Underlying or Underlyings that depreciate are of relatively low weight in the Basket. In addition, high correlation of movements in the values of the Underlyings during periods of positive returns among the Underlyings could have an adverse effect on any payment on the notes.

Risks Relating to Least Performing Underlying Notes and Greatest Performing Underlying Notes

You are exposed to the risks associated with each Underlying.

The return on Least Performing Underlying Notes or Greatest Performing Underlying Notes is contingent upon the individual performance of each Underlying and not the performance of a basket of the Underlyings. Unlike an instrument with a return linked to a basket of underlying assets, in which risk is diversified among all the components of the basket, you will be exposed equally to the risks related to any of the Underlyings. The performance of the Underlyings may not be correlated, and the performance of any one of the Underlyings over the term of the notes may negatively affect any payment on the notes and will not be offset by the performance of any or all of the other Underlyings. Accordingly, your investment is subject to the risks associated with each Underlying.

Any payment on the notes may be determined by reference to the performance of the Underlying that will result in the worst performance of the notes.

Any payment on the notes may be determined by reference to the performance of the Underlying that will result in the worst performance of the notes, and you will not benefit from the performance of any other Underlying. For example, for Least Performing Underlying Notes, which provide long (or bullish) exposure, any payment on the notes may be determined solely by reference to the Underlying with the lowest return. Similarly, for Greatest Performing Underlying Notes, which provide short (or bearish) exposure, any payment on the notes may be determined solely by reference to the Underlying with the highest return. Accordingly, the performance of a single Underlying can adversely affect the value of the notes and any payment on the notes, regardless of the performance of any other Underlying.

Risks Relating to Relative Performance Notes

The return on the notes is based on the relative performance of the Underlyings.

You may receive a lower return on the notes than you could receive by taking directly a long position in the Long Underlying(s) or a short position in the Short Underlying(s). Unlike a long position in the Long Underlying(s) or a short position in the Short Underlying(s), you may not earn a positive return even if each Long Underlying appreciates or each Short Underlying depreciates over the term of the notes. Unless otherwise specified in the relevant terms supplement, it is possible that you will not earn a positive return when all the Underlyings appreciate or when all the Underlyings depreciate, if, in either case, the return of the Long Underlying(s) is less than the return of the Short Underlying(s). The notes will be linked to the performance of the Long Underlying(s) as compared to the performance of the Short Underlying(s) and thus are affected by the relative, not absolute, performance of the Underlyings. Unless otherwise specified in the relevant terms supplement, in order to receive a positive return on the notes, the return of the Long Underlying(s) must be greater than the return of the Short Underlying(s), in each case calculated as set forth in the relevant terms supplement.

Changes in the value of any Long Underlying may be partially offset or entirely negated by changes in the value of any Short Underlying.

Changes in the value of any Long Underlying may be partially offset or entirely negated by changes in the value of any Short Underlying. If the returns of the Underlyings are strongly correlated, you may not receive a positive return on the notes, unless otherwise specified in the relevant terms supplement. Conversely, if the returns of the Underlyings are not correlated, your investment will be exposed to the return of the Long Underlying(s) relative to the return of the Short Underlying(s), in each case calculated as set forth in the relevant terms supplement. Your notes may not generate a positive return even if the return of the Long Underlying is positive or the return of the Short Underlying is negative.

You are exposed to the risks associated with each Underlying.

The return on Relative Performance Notes is contingent upon the individual performance of each Underlying and not the performance of a basket of the Underlyings. Unlike an instrument with a return linked to a basket of underlying assets, in which risk is diversified among all the components of the basket, you will be exposed equally to the risks related to all of the Underlyings. Poor performance by the Long Underlying(s) or strong performance by the Short Underlying(s) over the term of the notes may negatively affect your return on the notes. Accordingly, your investment is subject to the risks associated with each Underlying.

Risks Relating to an Underlying Stock

The Issuer and the Guarantor (if applicable) have no affiliation with the issuer of any Underlying Stock.

The issuer of any Underlying Stock is not an affiliate of the Issuer or the Guarantor (if applicable) and will not be involved in any of the Issuer's offerings of notes pursuant to this product supplement in any way. As a result, the Issuer and the Guarantor (if applicable) will have no ability to control the actions of the issuer of any Underlying Stock, including actions that could affect the value of any Underlying Stock or your notes. No Underlying Stock issuer will have an obligation to consider your interest as an investor in the notes in taking any corporate actions that might affect the value of your notes. None of the money you pay for the notes will go to the issuer of any Underlying Stock.

Your return on the notes will not reflect dividends or other distributions on an Underlying Stock.

Your return on the notes will not reflect the return you would realize if you actually owned an Underlying Stock and received the dividends or other distributions paid on that Underlying Stock (except in the limited circumstances set forth under "The Underlyings — Underlying Stocks — Anti-Dilution Adjustments — Cash Dividends or Distributions"). This is because the calculation agent will calculate any payment on the notes, in whole or in part, by reference to the values of that Underlying Stock. The values of that Underlying Stock will reflect the price of that Underlying Stock on the relevant Determination Date(s) without taking into consideration the value of dividends or other distributions paid on that Underlying Stock.

If an Underlying Stock is a non-U.S. equity security, any amount payable on the notes will not be adjusted for changes in exchange rates that might affect that Underlying Stock.

Although the non-U.S. equity security serving as the Underlying Stock is traded in a currency other than U.S. dollars and the notes are denominated in U.S. dollars, amounts payable on the notes, if any, will not be adjusted for changes in the exchange rate between the U.S. dollar and the non-U.S. currency in which a non-U.S. equity security serving as an Underlying Stock is denominated. Changes in exchange rates, however, may affect the value of the notes. In addition, changes in exchange rates reflect changes in various non-U.S. economies that in turn may affect any payment on the notes.

The Issuer, the Guarantor (if applicable) or one of their affiliates may serve as the depositary for the American depositary shares representing the common stock of an issuer.

The Issuer, the Guarantor (if applicable) or one of their affiliates may serve as depositary for some foreign companies that issue ADSs. If an Underlying Stock is an ADS, and the Issuer, the Guarantor (if applicable) or one of their affiliates serves as depositary for those ADSs, the Issuer's, the Guarantor's (if applicable) or their affiliate's interests, as depositary for the ADSs, may be adverse to your interests as a holder of the notes.

If an Underlying Stock is an ADS, the notes will be subject to currency exchange risk.

Because the price of an ADS is quoted and traded in U.S. dollars while the Underlying ADS Stock represented by that ADS is quoted and traded in a non-U.S. currency, the holders of the notes will be exposed to currency exchange rate risk with respect to the currency in which the Underlying ADS Stock trades. An investor's net exposure will depend on the extent to which that currency strengthens or weakens against the U.S. dollar. If the U.S. dollar changes in value relative to that currency, the value of the relevant ADSs and any payment on the notes may be adversely affected.

Of particular importance to potential currency exchange risk are:

- existing and expected rates of inflation;
- existing and expected interest rate levels;
- the balance of payments in the countries issuing those currencies and the United States and between each country and its major trading partners;
- political, civil or military unrest in the countries issuing those currencies and the United States; and
- the extent of governmental surpluses or deficits in the component countries and the United States.

All of these factors are, in turn, sensitive to the monetary, fiscal and trade policies pursued by the governments of various component countries, the United States and other countries important to international trade and finance.

The Issuer and the Guarantor (if applicable) have no control over exchange rates.

Foreign exchange rates can either float or be fixed by sovereign governments. Exchange rates of the currencies used by most economically developed nations are permitted to fluctuate in value relative to the U.S. dollar and to each other. However, from time to time governments and, in the case of countries using the euro, the European Central Bank, may use a variety of techniques, such as intervention by a central bank, the imposition of regulatory controls or taxes or changes in interest rates to influence the exchange rates of their currencies. Governments may also issue a new currency to replace an existing currency or alter the exchange rate or relative exchange characteristics by a devaluation or revaluation of a currency. These governmental actions could change or interfere with currency valuations and currency fluctuations that would otherwise occur in response to economic forces, as well as in response to the movement of currencies across borders. As a consequence, these governmental actions could adversely affect an investment in a note that is linked, in whole or in part, to the ADSs of one or more foreign issuers, which are quoted and traded in U.S. dollars, each representing an Underlying ADS Stock that is quoted and traded in a foreign currency.

The Issuer and the Guarantor (if applicable) will not make any adjustment or change in the terms of the notes in the event that exchange rates become fixed, or in the event of any devaluation or revaluation or imposition of exchange or other regulatory controls or taxes, or in the event of other developments affecting the U.S. dollar or any relevant foreign currency. You will bear those risks.

If an Underlying Stock is a non-U.S. equity security or an ADS, an investment in the notes is subject to risks associated with non-U.S. securities markets.

An investment in the notes linked, in whole or in part, to the value of a non-U.S. equity security, or the value of the ADSs of one or more foreign issuers representing interests in non-U.S. equity securities, involves risks associated with the securities markets in those countries where the relevant non-U.S. equity securities are traded, including risks of volatility in those markets, governmental intervention in those markets and cross shareholdings in companies in certain countries. Also, there is generally less publicly available information about companies in some of these jurisdictions than about U.S. companies that are subject to the reporting requirements of the SEC, and generally non-U.S. companies are subject to accounting, auditing and financial reporting standards and requirements and securities trading rules different from those applicable to U.S. reporting companies.

The prices of securities in non-U.S. markets may be affected by political, economic, financial and social factors in those markets, including changes in a country's government, economic and fiscal policies, currency exchange laws or other laws or restrictions. Moreover, the economies of these countries may differ favorably or unfavorably from the economy of the United States in such respects as growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency. These countries may be subjected to different and, in some cases, more adverse economic environments.

The economies of emerging market countries in particular face several concerns, including relatively unstable governments that may present the risks of nationalization of businesses, restrictions on foreign ownership and prohibitions on the repatriation of assets, and which may have less protection of property rights than more developed countries. These economies may also be based on only a few industries, may be highly vulnerable to changes in local and global trade conditions and may suffer from extreme and volatile debt burdens or inflation rates. In addition, local securities markets may trade a small number of securities and may be unable to respond effectively to increases in trading volume, potentially making prompt liquidation of holdings difficult or impossible at times. The risks of the economies of emerging market countries are relevant for notes linked, in whole or in part, to the common stock or ADSs of one or more emerging markets issuers.

Some or all of these factors may influence the price of the non-U.S. equity security or ADSs. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from another factor or factors. You cannot predict the future performance of the non-U.S. equity security or ADSs based on their historical performance. The value of the non-U.S. equity security or ADSs may change in a manner that would adversely affect any payment on the notes.

There are important differences between the rights of holders of ADSs and the rights of holders of the common stock of the foreign company.

If your note is linked, in whole or in part, to the performance of the ADSs of one or more foreign issuers, you should be aware that your note is linked, in whole or in part, to the prices of the ADSs and not to the applicable Underlying ADS Stocks, and there exist important differences between the rights of holders of ADSs and those of the Underlying ADS Stocks. Each ADS is a security evidenced by American Depositary Receipts that represents a specified number of shares of common stock of a foreign issuer. Generally, the ADSs are issued under a deposit agreement, which sets forth the rights and responsibilities of the depositary, the foreign issuer and holders of the ADSs, which may be different from the rights of holders of common stock of the foreign issuer. For example, the foreign issuer may make distributions in respect of its common stock that are not passed on to the holders of its ADSs. Any such differences between the rights of holders of the ADSs and holders of the applicable Underlying ADS Stock may be significant and may materially and adversely affect the value of the notes.

In some circumstances, the payment you receive on the notes may be based on the common stock(s) (or ADSs, as applicable) of one or more companies that are not the applicable Underlying Stock(s).

Following certain corporate events relating to an Underlying Stock where its issuer is not the surviving entity, a portion of any payment on the notes may be based on the common stock of a successor to that Underlying Stock issuer or any cash or any other assets distributed to holders of that Underlying Stock in the relevant corporate event. The occurrence of these corporate events and the consequent adjustments may materially and adversely affect the value of the notes. The specific corporate events that can lead to these adjustments and the procedures for selecting Exchange Property (as described below) are described in the section of this product supplement called "The Underlyings — Underlying Stocks — Reorganization Events."

In addition, following the delisting or discontinuation of trading of a non-U.S. equity security serving as the Underlying Stock or the nationalization of the issuer of a non-U.S. equity security serving as the Underlying Stock, the calculation agent will have the option to replace the Underlying Stock with the common stock of a company organized in or with its principal executive office located in, the country in which the issuer of the Underlying Stock is organized, or has its principal executive office, selected from among the common stocks of three companies with the three largest market capitalizations within the same industry as the issuer of the Underlying Stock that also have an equity security that is listed and traded on a national securities exchange in the United States. Upon the occurrence of any such event, you will become subject to the closing price risk of the Successor Foreign Underlying Stock. The procedures for selecting another Underlying Stock and Underlying Stock issuer are described in the section of this product supplement entitled "The Underlyings — Underlying Stocks — Delisting of an Underlying Stock or Nationalization of an Underlying Stock Issuer." You should read the section of this product supplement called "The Underlyings — Underlying Stocks — Delisting of an Underlying Stock or Nationalization of an Underlying Stock Issuer" for more information. Replacing the original non-U.S. equity security serving as the Underlying Stock with another equity security may materially and adversely affect the value of the notes.

Furthermore, for notes linked to the performance of one or more ADSs, if that ADS is no longer listed or admitted to trading on a U.S. securities exchange registered under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), or included in the OTC Bulletin Board, or if the ADS facility between the issuer of the applicable Underlying ADS Stock and the ADS depositary is terminated for any reason, the calculation agent will have the option to either (a) (i) replace that ADS with the ADS of a company selected from among the ADSs of three companies organized in, or with their principal executive offices located in, the country in which the issuer of that original ADS is organized, or has its principal executive office, and that are then registered to trade on the New York Stock Exchange (the "**NYSE**") or The NASDAQ Stock Market with the same primary Standard Industrial Classification Code ("**SIC Code**") as that original ADS that, in the sole discretion of the calculation agent, are the most comparable to that original ADS, taking into account such factors as the calculation agent deems relevant, including, without limitation, market capitalization, dividend history and stock price volatility or (ii) in certain circumstances, replace that ADS with the ADS of a company that is organized in, or with its principal executive office located in, the country in which the issuer of the original ADS is organized, or has its principal executive office and that is then registered to trade on the NYSE or The NASDAQ Stock Market that, in the sole discretion of the calculation agent, is the most comparable to the original ADS, taking into account such factors as the calculation agent deems relevant, including, without limitation, market capitalization, dividend history and stock price volatility and that is within the same Division and Major Group classification (as defined by the Office of Management and Budget) as the primary SIC Code for the original ADS or (iii) in certain circumstances, replace that ADS with the common stock of a company that is then registered to trade on the NYSE or The NASDAQ Stock Market with the same primary SIC Code as the original ADS that, in the sole discretion of the calculation agent, is the most comparable to the original ADS, taking into account such factors as the calculation agent deems relevant including, without limitation, market capitalization, dividend history and stock price volatility or (b) deem the applicable Underlying ADS Stock to be that Underlying Stock. You should read the section of this product supplement called "The Underlyings — Underlying Stocks — Delisting of ADSs or Termination of ADS Facility" for more information. Replacing the original ADS serving as an Underlying Stock with another ADS may materially and adversely affect the value of the notes.

Anti-dilution protection is limited and may be discretionary.

The calculation agent will make adjustments to the Stock Adjustment Factor for each Underlying Stock, which will be set initially at 1.0, for certain adjustment events (as defined below) affecting that Underlying Stock, including stock splits and certain corporate actions, such as mergers. The calculation agent is not required, however, to make such adjustments in response to all corporate actions, including if the issuer of an Underlying Stock or another party makes a partial tender or partial exchange offer for an Underlying Stock. If such a dilution event occurs and the calculation agent is not required to make an adjustment, the value of the notes may be materially and adversely affected. You should also be aware that the calculation agent may make adjustments in response to events that are not described in this product supplement to account for any dilutive or concentrative effect, but the calculation agent is under no obligation to do so. With respect to the issuance of transferrable rights or warrants, the calculation agent may also make adjustments in a manner that differs from what is described in this product supplement in good faith to ensure an equitable result. Subject to the foregoing, the calculation agent is under no obligation to consider your interests as a holder of the notes in making these determinations. See "The Underlyings — Underlying Stocks — Anti-Dilution Adjustments" for further information.

The Issuer or the Guarantor (if applicable) may exercise any and all rights it may have as a lender to, or a security holder of, the issuer of an Underlying Stock.

If the Issuer, the Guarantor (if applicable) or any of their affiliates are lenders to, or hold securities of, the issuer of an Underlying Stock, the Issuer or the Guarantor (if applicable) will have the right, but not the obligation, to exercise or refrain from exercising its rights as a lender to, or holder of securities of, that issuer. Any exercise of the Issuer's or Guarantor's (if applicable) rights as a lender or holder of securities of the issuer of an Underlying Stock, or its refraining from such exercise, will be made without regard to your interests and could affect the value of the notes.

There can be no assurance that publicly available information provided about the issuer of an Underlying Stock is accurate or complete.

All disclosures contained in the relevant terms supplement regarding the issuer of any Underlying Stock will be derived from publicly available documents and other publicly available information, without independent verification. The Issuer and the Guarantor (if applicable) have not participated, and will not participate, in the preparation of those documents, and the Issuer and the Guarantor (if applicable) have not made, and will not make, any due diligence inquiry with respect to the issuer of any Underlying Stock in connection with the offering of the notes. The Issuer and the Guarantor (if applicable) do not make any representation that those publicly available documents or any other publicly available information regarding the issuer of any Underlying Stock is accurate or complete, and the Issuer and the Guarantor (if applicable) are not responsible for public disclosure of information by the issuer of any Underlying Stock, whether contained in filings with the SEC or otherwise. The Issuer and the Guarantor (if applicable) also cannot give any assurance that all events occurring prior to the date of the relevant terms supplement (including events that would affect the accuracy or completeness of the publicly available documents of the issuer of any Underlying Stock) that would affect the value of any Underlying Stock will have been publicly disclosed. Subsequent disclosure of any of these events or the disclosure of, or failure to disclose, material future events concerning the issuer of any Underlying Stock could affect the market value of the notes or any payment on the notes. Any prospective purchaser of the notes should undertake an independent investigation of the issuer of any Underlying Stock as in its judgment is appropriate to make an informed decision with respect to an investment in the notes.

Risks Relating to an Index

The sponsor of an Index (an "Index Sponsor") may adjust that Index in a way that affects its level, and the Index Sponsor has no obligation to consider your interests.

The applicable Index Sponsor is responsible for maintaining an Index. The Index Sponsor can add, delete or substitute the securities, commodities, futures contracts or other assets or market measures underlying the applicable Index or make other methodological changes that could change the level of that Index. You should realize that the changing of securities, commodities, futures contracts or other assets or market measures included in an Index may affect that Index, as a newly added security, commodity, futures contract or other asset or market measure may perform significantly better or worse than the asset or assets it replaces. Additionally, the Index Sponsor may alter, discontinue or suspend calculation or dissemination of the applicable Index. Any of these actions could adversely affect the value of the notes. The Index Sponsor of an Index has no obligation to consider your interests in calculating or revising that Index. See the relevant index description section in any accompanying underlying supplement or the relevant terms supplement for additional information.

The reported level of an Index may include the deduction of index fees or other adjustments.

Any accompanying underlying supplement or the relevant terms supplement may specify that the reported levels of an Index may include a deduction from the aggregate performance of the relevant securities, commodities, futures contracts or other assets or market measures underlying that Index of index fees or other adjustments. Under these circumstances, as a result of these deductions, the value of that Index will trail the value of a hypothetical identically constituted synthetic portfolio that is not subject to those index fees or other adjustments.

For notes linked to an Index, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, to the Issuer's and the Guarantor's (if applicable) knowledge, their securities are not currently included in an Index.

As a general matter, none of the issuers the securities of which are included in an Index will be involved in the offering of the notes in any way. As a result, the Issuer and the Guarantor (if applicable) will have no ability to control the actions of the issuers of those securities, including actions that could affect the value of the securities underlying an Index or your notes. None of those issuers will have any obligation to consider your interests as a holder of the notes in taking any corporate actions that might affect the value of your notes. Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, none of the money you pay for the notes will go to any of the issuers of the securities included in any Index. See any accompanying underlying supplement or the relevant terms supplement for additional information about whether the Issuer or the Guarantor (if applicable) is one of the companies included in an Index.

In the event that the Issuer's or the Guarantor's (if applicable) securities are included in an Index, the Issuer and the Guarantor (if applicable) will have no obligation to consider your interests as a holder of the notes in taking any action that might affect the level of that Index or the value of your notes.

For notes that provide long (or bullish) exposure to an Index that is not a total return index, your return on the notes will not reflect dividends, interest payments or other distributions on the securities underlying that Index.

For notes that provide long (or bullish) exposure to an Index that is not a total return index, your return on the notes will not reflect the return you would realize if you actually owned the securities underlying that Index and received the dividends, interest payments or other distributions paid on those securities. This is because the calculation agent will calculate any payment on the notes, in whole or in part, by reference to the values of that Index. The values of that Index will reflect the prices of the securities underlying that Index on the relevant Determination Date(s) without taking into consideration the value of dividends, interest payments or other distributions paid on those securities.

For notes that provide short (or bearish) exposure to an Index that is a total return index, your return on the notes will be adversely affected by dividends, interest payments or other distributions on the securities underlying that Index.

The level of a total return index reflects the prices of the securities included in that index, as well as the value of dividends, interest payments or other distributions on the securities underlying that Index on those securities. Accordingly, if the notes are linked to a total return index, any dividends, interest payments or other distributions on the securities underlying that Index will have a positive effect on the level of that index, which will adversely affect the value of the short (or bearish) notes.

For notes linked in whole or in part to a Non-U.S. Index, the notes will be subject to risks associated with Non-U.S. Indices.

For notes linked in whole or in part to a Non-U.S. Index, the notes will be subject to risks associated with Non-U.S. Indices. See "— Risks Relating to a Non-U.S. Index or a Non-U.S. Fund" below.

For notes linked in whole or in part to a Bond Index, the notes will be subject to risks associated with Bond Indices.

For notes linked in whole or in part to a Bond Index, the notes will be subject to risks associated with Bond Indices. See "— Risks Relating to a Bond Index or a Bond Fund" below.

For notes linked in whole or in part to a Commodity Index, the notes will be subject to risks associated with Commodity Indices.

For notes linked in whole or in part to a Commodity Index, the notes will be subject to risks associated with Commodity Indices. See "— Risks Relating to a Commodity Index or a Commodity Fund" below.

Risks Relating to a Fund

The policies of the investment adviser or commodity pool operator, as applicable, for a Fund, and the sponsor of its Underlying Index, if applicable, could affect the value of, and any amount payable on, the notes.

The policies of the investment adviser or commodity pool operator, as applicable, for a Fund concerning the calculation of the Fund's net asset value; additions, deletions or substitutions of securities, commodities, futures contracts or other assets or market measures underlying that Fund; substitutions of its Underlying Index, if applicable; and the manner in which changes affecting an Underlying Index, if applicable, are reflected in that Fund, could affect the market price of the shares of that Fund and, therefore, affect any payment on the notes and the value of the notes before maturity. Any amount payable on the notes and their value could also be affected if the investment adviser or commodity pool operator, as applicable, changes these policies, for example, by changing the manner in which it calculates the Fund's net asset value, or if the investment adviser or commodity pool operator, as applicable, discontinues or suspends calculation or publication of the Fund's net asset value, in which case it may become difficult to determine the value of the notes.

In addition, the sponsor of an Underlying Index, if applicable, is responsible for the design and maintenance of the Underlying Index. The policies of the sponsor concerning the calculation of the Underlying Index, including decisions regarding the addition, deletion or substitution of the securities, commodities, futures contracts or other assets or market measures included in the Underlying Index, if applicable, could affect the value of the Underlying Index and, consequently, the market prices of the shares of the Fund and, therefore, any payment on the notes and the value of the notes.

There are risks associated with a Fund.

A Fund may have a limited operating history. Although the shares of a Fund may be listed for trading on a securities exchange and a number of similar products have been traded on securities exchanges for varying periods of time, there is no assurance that an active trading market will continue for the shares of any Fund or that there will be liquidity in the trading market.

In addition, a Fund is subject to management risk, which is the risk that the applicable investment adviser's investment strategy, the implementation of which is subject to a number of constraints, may not produce the intended results. These constraints could affect the market prices of the shares of a Fund and, consequently, could adversely affect the value of the notes. See any applicable Fund description in the relevant terms supplement or any accompanying underlying supplement for additional information.

Further, under continuous listing standards adopted by the applicable exchange on which it is listed, a Fund will be required to confirm on an ongoing basis that the components of the Underlying Index satisfy the applicable listing requirements. In the event that a Fund's Underlying Index does not comply with the applicable listing requirements, the Fund would be required to rectify the non-compliance by requesting that the sponsor of the Underlying Index modify the Underlying Index, adopting a new Underlying Index or obtaining relief from the SEC. There can be no assurance that the sponsor of the Underlying Index would modify the Underlying Index or that relief would be obtained from the SEC and, therefore, non-compliance with the continuous listing standards may result in a Fund being delisted by the applicable exchange. If a Fund were delisted by the applicable exchange, the calculation agent would (i) substitute an exchange-traded fund that it determines, in its sole discretion, to be comparable to that Fund or (ii) if no successor fund is available, in its sole discretion, calculate the appropriate closing price applicable, of one share of that Fund by a computation methodology that it determines will as closely as reasonably possible replicate that Fund and the trading price, if applicable, of that Fund at any time on any relevant day will be deemed to equal the closing price on that day, as determined by the calculation agent, which may adversely affect the value of the notes and any payment on the notes.

The anti-dilution protection is limited.

The calculation agent will make adjustments to the Share Adjustment Factor for a Fund, which will be set initially at 1.0 in each case, for certain events affecting the shares of that Fund. See "The Underlyings — Funds — Anti-Dilution Adjustments." The calculation agent is not required, however, to make those adjustments in response to all events that could affect the shares of a Fund. If an event occurs that does not require the calculation agent to make an adjustment, the value of the notes may be materially and adversely affected.

For notes linked in whole or in part to a Fund that is designed to track an Underlying Index, the performance and market value of the Fund, particularly during periods of market volatility, may not correlate with the performance of its Underlying Index as well as the net asset value per share of the Fund.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, a Fund that is designed to track an Underlying Index uses a representative sampling strategy or a replication or indexing strategy to attempt to track the performance of its Underlying Index. Pursuant to a representative sampling strategy, a Fund invests in a representative sample of securities that collectively has an investment profile similar to its Underlying Index; however, a Fund may not hold all or substantially all of the securities, commodities, futures contracts or other assets or market measures included in its Underlying Index. Even if a Fund uses a replication or indexing strategy, the Fund may not hold all of the securities, commodities, futures contracts or other assets or market measures included in its Underlying Index. Therefore, while the performance of a Fund is linked principally to the performance of its Underlying Index, its performance is also generally linked in part to assets other than the securities, commodities, futures contracts or other assets or market measures included in its Underlying Index because, unless otherwise specified in the relevant terms supplement, its investment adviser generally may invest a portion of a Fund's assets in securities not included in the Underlying Index and in other assets, including potentially shares of money market funds affiliated with or advised by its investment adviser.

In addition, the performance of a Fund will reflect additional transaction costs and fees that are not included in the calculation of its Underlying Index. Also, the component securities, commodities, futures contracts or other assets or market measures of a Fund may be unavailable in the secondary market due to other extraordinary circumstances. Corporate actions with respect to any of the securities (such as mergers and spin-offs) also may impact the variance between a Fund and its Underlying Index. Finally, because the shares of a Fund may be traded on a securities exchange and may be subject to market supply and investor demand, the market value of one share of a Fund may differ from the net asset value per share of the Fund.

During periods of market volatility, the component securities, commodities, futures contracts or other assets or market measures of a Fund may be unavailable in the secondary market, market participants may be unable to calculate accurately the net asset value per share of a Fund and the liquidity of a Fund may be adversely affected. This kind of market volatility may also disrupt the ability of market participants to create and redeem shares in a Fund. Further, market volatility may adversely affect, sometimes materially, the prices at which market participants are willing to buy and sell shares of a Fund. As a result, under these circumstances, the market value of shares of a Fund may vary substantially from the net asset value per share of that Fund.

For all of the foregoing reasons, the performance of a Fund that is designed to track an Underlying Index may not correlate with the performance of its Underlying Index as well as the net asset value per share of that Fund, which could materially and adversely affect the value of the notes in the secondary market and/or reduce any payments on the notes. Consequently, the return on the notes will not be the same as investing (or taking a short position) directly in any Fund or any relevant Underlying Index or in the securities, commodities, futures contracts or other assets or market measures held by any Fund or included in any relevant Underlying Index, and will not be the same as investing in a debt security linked to the performance of any relevant Underlying Index.

Additionally, if market volatility or these events were to occur on any of the Determination Date(s), the calculation agent would maintain discretion to determine whether such market volatility or events have caused a market disruption event to occur, and such determination may affect payments on the notes. If the calculation agent determines that no market disruption event has occurred, payments on the notes would be based on the closing price of the share of the applicable Fund on the Determination Date(s), even if the relevant Fund is underperforming its Underlying Index or the component securities of its Underlying Index and/or trading below the net asset value per share of that Fund.

Funds that are actively managed are subject to risks that are different from those of passively managed funds.

Unlike a passively managed Fund, an actively managed Fund may not attempt to track an index or other benchmark, and the investment decisions for an actively managed Fund are instead made by its portfolio manager. The portfolio manager of an actively managed Fund may change during the term of your notes, and any replacement portfolio manager may not achieve the same results as prior portfolio managers. The portfolio manager of an actively managed Fund may adopt a strategy or strategies that are significantly higher risk than the indexing strategy employed by a passively managed Fund.

Your return on the notes will not reflect dividends or other distributions on a Fund.

Your return on the notes will not reflect the return you would realize if you actually owned a Fund and received the dividends or other distributions paid on that Fund (except in the limited circumstances set forth under "The Underlyings — Funds — Anti-Dilution Adjustments — Cash Dividends or Distributions"). This is because the calculation agent will calculate any payment on the notes, in whole or in part, by reference to the values of that Fund. The values of that Fund will reflect the price of that Fund on the relevant Determination Date(s) without taking into consideration the value of dividends or other distributions paid on that Fund.

There can be no assurance that publicly available information provided about any Fund is accurate or complete.

All disclosures contained in the relevant terms supplement regarding any Fund will be derived from publicly available documents and other publicly available information, without independent verification. The Issuer and the Guarantor (if applicable) have not participated, and will not participate, in the preparation of those documents, and the Issuer and the Guarantor (if applicable) have not made, and will not make, any due diligence inquiry with respect to any Fund in connection with the offering of the notes. The Issuer and the Guarantor (if applicable) do not make any representation that those publicly available documents or any other publicly available information regarding any Fund is accurate or complete, and the Issuer and the Guarantor (if applicable) are not responsible for public disclosure of information by any Fund, whether contained in filings with the SEC or otherwise. The Issuer and the Guarantor (if applicable) also cannot give any assurance that all events occurring prior to the date of the relevant terms supplement (including events that would affect the accuracy or completeness of the publicly available documents of any Fund) that would affect the value of any Fund will have been publicly disclosed. Subsequent disclosure of any of these events or the disclosure of, or failure to disclose, material future events concerning any Fund could affect the market value of the notes or any payment on the notes. Any prospective purchaser of the notes should undertake an independent investigation of any Fund as in its judgment is appropriate to make an informed decision with respect to an investment in the notes.

For notes linked in whole or in part to a Non-U.S. Fund, the notes will be subject to risks associated with Non-U.S. Funds.

For notes linked in whole or in part to a Non-U.S. Fund, the notes will be subject to risks associated with Non-U.S. Funds. See "— Risks Relating to a Non-U.S. Index or a Non-U.S. Fund" below.

For notes linked in whole or in part to a Bond Fund, the notes will be subject to risks associated with Bond Funds.

For notes linked in whole or in part to a Bond Fund, the notes will be subject to risks associated with Bond Funds. See "— Risks Relating to a Bond Index or a Bond Fund" below.

For notes linked in whole or in part to a Commodity Fund, the notes will be subject to risks associated with Commodity Funds.

For notes linked in whole or in part to a Commodity Fund, the notes will be subject to risks associated with Commodity Funds. See "— Risks Relating to a Commodity Index or a Commodity Fund" below.

Risks Relating to a Non-U.S. Index or a Non-U.S. Fund

For notes linked in whole or in part to a Non-U.S. Index or a Non-U.S. Fund, if the prices of its component non-U.S. securities are not converted into U.S. dollars for purposes of calculating the value of that Non-U.S. Index or Non-U.S. Fund, any amount payable on the notes will not be adjusted for changes in exchange rates that might affect that Non-U.S. Index or Non-U.S. Fund.

Because the prices of the non-U.S. securities underlying the applicable Non-U.S. Index or Non-U.S. Fund are not converted into U.S. dollars for purposes of calculating the value of that Non-U.S. Index or Non-U.S. Fund and although the non-U.S. securities underlying that Non-U.S. Index or Non-U.S. Fund are traded in currencies other than U.S. dollars, and the notes, which are linked in whole or in part to that Non-U.S. Index or Non-U.S. Fund, are denominated in U.S. dollars, amounts payable on the notes, if any, will not be adjusted for changes in the exchange rate between the U.S. dollar and each of the currencies in which the non-U.S. securities underlying that Non-U.S. Index or Non-U.S. Fund are denominated. Changes in exchange rates, however, may affect the value of the notes. In addition, changes in exchange rates reflect changes in various non-U.S. economies that in turn may affect any payment on the notes.

For notes linked in whole or in part to a Non-U.S. Index or a Non-U.S. Fund, if the prices of its component non-U.S. securities are converted into U.S. dollars for purposes of calculating the value of that Non-U.S. Index or Non-U.S. Fund, the notes will be subject to currency exchange risk.

Because the prices of the non-U.S. securities underlying the applicable Non-U.S. Index or Non-U.S. Fund are converted into U.S. dollars for the purposes of calculating the value of that Non-U.S. Index or Non-U.S. Fund, the holders of the notes will be exposed to currency exchange rate risk with respect to each of the currencies in which the non-U.S. securities underlying that Non-U.S. Index or Non-U.S. Fund trade. An investor's net exposure will depend on the extent to which those currencies strengthen or weaken against the U.S. dollar and the relative weight of the non-U.S. securities underlying that Non-U.S. Index or Non-U.S. Fund denominated in each applicable currency. If, taking into account the weighting, the U.S. dollar changes in value relative to those currencies, the value of that Non-U.S. Index or Non-U.S. Fund and any payment on the notes may be adversely affected.

Of particular importance to potential currency exchange risk are:

- existing and expected rates of inflation;
- existing and expected interest rate levels;
- the balance of payments in the countries issuing those currencies and in the United States and between each country and its major trading partners;
- political, civil or military unrest in the countries issuing those currencies and in the United States; and
- the extent of governmental surpluses or deficits in the component countries and the United States.

All of these factors are, in turn, sensitive to the monetary, fiscal and trade policies pursued by the governments of various component countries, the United States and other countries important to international trade and finance.

For notes linked in whole or in part to a Non-U.S. Index or a Non-U.S. Fund, if the prices of its component non-U.S. securities are converted into U.S. dollars for purposes of calculating the value of that Non-U.S. Index or Non-U.S. Fund, changes in the volatility of exchange rates and the correlation between those rates and the values of that Non-U.S. Index or Non-U.S. Fund are likely to affect the market value of the notes.

The exchange rate between the U.S. dollar and each of the currencies in which the non-U.S. securities underlying the applicable Non-U.S. Index or Non-U.S. Fund are denominated refers to a foreign exchange spot rate that measures the relative values of two currencies — the particular currency in which a security composing that Non-U.S. Index or Non-U.S. Fund is denominated and the U.S. dollar. This exchange rate reflects the amount of the particular currency in which a security composing a Non-U.S. Index or Non-U.S. Fund is denominated that can be purchased for one U.S. dollar and thus increases when the U.S. dollar appreciates relative to the particular currency in which that security is denominated. The volatility of the exchange rate between the U.S. dollar and each of the currencies in which the non-U.S. securities underlying a Non-U.S. Index or Non-U.S. Fund are denominated refers to the size and frequency of changes in that exchange rate.

Because the applicable Non-U.S. Index or Non-U.S. Fund is calculated, in part, by converting the closing prices of the non-U.S. securities underlying that Non-U.S. Index or Non-U.S. Fund into U.S. dollars, the volatility of the exchange rate between the U.S. dollar and each of the currencies in which those non-U.S. securities are denominated could affect the market value of the notes.

The correlation of the exchange rate between the U.S. dollar and each of the currencies in which the non-U.S. securities underlying a Non-U.S. Index or Non-U.S. Fund are denominated and the value of that Non-U.S. Index or Non-U.S. Fund refers to the relationship between the percentage changes in that exchange rate and the percentage changes in the value of that Non-U.S. Index or Non-U.S. Fund. The direction of the correlation (whether positive or negative) and the extent of the correlation between the percentage changes in the exchange rate between the U.S. dollar and each of the currencies in which the non-U.S. securities underlying a Non-U.S. Index or Non-U.S. Fund are denominated and the percentage changes in the value of that Non-U.S. Index or Non-U.S. Fund could affect the value of the notes.

The Issuer and the Guarantor (if applicable) have no control over exchange rates.

Foreign exchange rates can either float or be fixed by sovereign governments. Exchange rates of the currencies used by most economically developed nations are permitted to fluctuate in value relative to the U.S. dollar and to each other. However, from time to time governments and, in the case of countries using the euro, the European Central Bank, may use a variety of techniques, such as intervention by a central bank, the imposition of regulatory controls or taxes or changes in interest rates to influence the exchange rates of their currencies. Governments may also issue a new currency to replace an existing currency or alter the exchange rate or relative exchange characteristics by a devaluation or revaluation of a currency. These governmental actions could change or interfere with currency valuations and currency fluctuations that would otherwise occur in response to economic forces, as well as in response to the movement of currencies across borders. As a consequence, these governmental actions could adversely affect an investment in a note that is linked, in whole or in part, to a Non-U.S. Index or Non-U.S. Fund.

The Issuer and the Guarantor (if applicable) will not make any adjustment or change in the terms of the notes in the event that exchange rates become fixed, or in the event of any devaluation or revaluation or imposition of exchange or other regulatory controls or taxes, or in the event of other developments affecting the U.S. dollar or any relevant foreign currency. You will bear those risks.

For notes linked in whole or in part to a Non-U.S. Index or a Non-U.S. Fund, an investment in the notes is subject to risks associated with non-U.S. securities markets.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the securities that compose a Non-U.S. Index or Non-U.S. Fund have been issued by non-U.S. companies. Investments in securities linked to the value of securities of non-U.S. issuers involve risks associated with the securities markets in those countries where the relevant non-U.S. securities are traded, including risks of volatility in those markets, governmental intervention in those markets and cross shareholdings in companies in certain countries. Also, there is generally less publicly available information about companies in some of these jurisdictions than about U.S. companies that are subject to the reporting requirements of the SEC, and generally non-U.S. companies are subject to accounting, auditing and financial reporting standards and requirements and securities trading rules different from those applicable to U.S. reporting companies.

The prices of securities in non-U.S. markets may be affected by political, economic, financial and social factors in those markets, including changes in a country's government, economic and fiscal policies, currency exchange laws or other laws or restrictions. Moreover, the economies of these countries may differ favorably or unfavorably from the economy of the United States in such respects as growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency. These countries may be subjected to different and, in some cases, more adverse economic environments.

The economies of emerging market countries in particular face several concerns, including relatively unstable governments that may present the risks of nationalization of businesses, restrictions on foreign ownership and prohibitions on the repatriation of assets, and which may have less protection of property rights than more developed countries. These economies may also be based on only a few industries, be highly vulnerable to changes in local and global trade conditions and may suffer from extreme and volatile debt burdens or inflation rates. In addition, local securities markets may trade a small number of securities and may be unable to respond effectively to increases in trading volume, potentially making prompt liquidation of holdings difficult or impossible at times. The risks of the economies of emerging market countries are relevant for notes linked to a Non-U.S. Index or Non-U.S. Fund composed of securities traded in one or more emerging market countries.

Some or all of these factors may influence the closing level of a Non-U.S. Index or the closing price of one share of a Non-U.S. Fund. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from another factor or factors. You cannot predict the future performance of an Index or a Fund based on its historical performance. The level of a Non-U.S. Index or the price of a Non-U.S. Fund may change in a manner that would adversely affect any payment on the notes.

Risks Relating to a Bond Index or a Bond Fund

Notes linked in whole or in part to a Bond Index or Bond Fund are subject to significant risks associated with fixed-income securities, including interest rate-related risks.

Investing in notes linked in whole or in part to a Bond Index or Bond Fund differs significantly from investing directly in bonds to be held to maturity, as the values of that Bond Index or Bond Fund change, at times significantly, during each trading day based upon the current market prices of their underlying bonds. The market prices of these bonds are volatile and significantly influenced by a number of factors, particularly the yields on these bonds as compared to current market interest rates and the actual or perceived credit quality of the issuer of these bonds.

In general, fixed-income securities are significantly affected by changes in current market interest rates. As interest rates rise, the price of fixed-income securities is likely to decrease, and as interest rates fall, the price of fixed-income securities is likely to increase. Securities with longer durations tend to be more sensitive to interest rate changes, usually making them more volatile than securities with shorter durations. As a result, rising interest rates may cause the value of the long-dated bonds underlying a Bond Index or Bond Fund to which the notes provide long (or bullish) exposure to decline, possibly significantly, which would adversely affect the value of the notes. In addition, falling interest rates may cause the value of the long-dated bonds underlying a Bond Index or Bond Fund to which the notes provide short (or bearish) exposure to increase, possibly significantly, which would adversely affect the value of the notes.

Interest rates are subject to volatility due to a variety of factors, including:

- sentiment regarding underlying strength or weakness in the local economies of the issuers of the securities underlying a Bond Index or Bond Fund and global economies;
- expectations regarding the level of price inflation;
- sentiment regarding credit quality in the markets of the issuers of the securities underlying a Bond Index or Bond Fund and global credit markets;
- central bank policies regarding interest rates; and
- the performance of capital markets that include the issuers of the securities underlying a Bond Index or Bond Fund and foreign capital markets.

Prices of U.S. treasury notes have recently fallen after trading near historic high prices for an extended period of time. If the price of the U.S. treasury notes reverts to its historic mean or otherwise continues to fall as a result of a general increase in interest rates, Federal Reserve policies or actions, or perceptions of reduced credit quality of the U.S. government or otherwise, the value of the bonds underlying a Bond Index or Bond Fund that includes U.S. treasury notes will decline, which could have a negative impact on the performance of notes that provide long (or bullish) exposure to that Bond Index or Bond Fund.

In addition, inflation-protected bonds typically have lower yields than conventional fixed-rate bonds because of their inflation adjustment feature. For a Bond Index or Bond Fund that tracks inflation-protected bonds, if inflation is low, the benefit received from the inflation-protected feature of the underlying bonds may not sufficiently compensate you for their reduced yield.

Notes that provide long (or bullish) exposure to a Bond Index or Bond Fund are subject to significant risks associated with fixed-income securities, including credit risk.

The prices of the bonds underlying a Bond Index or Bond Fund are significantly influenced by the creditworthiness of the issuers of those bonds. The bonds underlying a Bond Index or Bond Fund may have their credit ratings downgraded, including in the case of the investment-grade bonds, a downgrade from investment grade to non-investment grade status, or have their credit spreads widen significantly. Following a ratings downgrade or the widening of credit spreads, some or all of the bonds underlying a Bond Index or Bond Fund may suffer significant and rapid price declines. These events may affect only a few or a large number of the bonds underlying a Bond Index or Bond Fund. For example, during the most recent credit crisis in the United States, credit spreads widened significantly as the market demanded very high yields on corporate bonds, and as a result, the prices of the bonds in the U.S. dropped significantly. There can be no assurance that some or all of the factors that contributed to that credit crisis will not depress the price, perhaps significantly, of the bonds underlying a Bond Index or Bond Fund to which the notes provide long (or bullish) exposure, which would adversely affect the value of the notes.

Further, a Bond Index or Bond Fund that provides exposure to the high yield corporate market is subject to high-yield securities risk. Securities that are rated below investment grade (commonly known as “junk bonds,” including those bonds rated at BB+ or lower by S&P or Fitch or Ba1 or lower by Moody’s) may be more volatile than higher-rated securities of similar maturity. High-yield securities may also be subject to greater levels of credit or default risk than higher-rated securities. The value of high-yield securities can be adversely affected by overall economic conditions, such as an economic downturn or a period of rising interest rates, and high-yield securities may be less liquid and more difficult to sell at an advantageous time or price or to value than higher-rated securities. In particular, high-yield securities are often issued by smaller, less creditworthy companies or by highly leveraged (indebted) firms, which are generally less able than more financially stable firms to make scheduled payments of interest and principal.

Notes that provide short (or bearish) exposure to a Bond Index or Bond Fund are subject to risks associated with improvements in the credit quality of fixed-income securities.

The prices of the bonds underlying a Bond Index or Bond Fund are significantly influenced by the creditworthiness of the issuers of those bonds. The bonds underlying a Bond Index or Bond Fund may have their credit ratings upgraded, including in the case of the non-investment-grade bonds, an upgrade from non-investment grade to investment grade status, or have their credit spreads tighten significantly. Following a ratings upgrade or the tightening of credit spreads, some or all of the bonds underlying a Bond Index or Bond Fund may increase in price, which would adversely affect the value of notes that provide short (or bearish) exposure to that Bond Index or Bond Fund.

The value of a Bond Index or Bond Fund may be influenced by unpredictable changes in the local governments and economies of the local governments of the issuers of the bonds underlying that Bond Index or Bond Fund.

The value of a Bond Index or Bond Fund may be influenced by unpredictable changes, or expectations of changes, in the local markets for the bonds underlying that Bond Index or Bond Fund. Changes in the local governments of the issuers of the bonds underlying a Bond Index or Bond Fund that may influence the value of the notes include:

- economic performance, including any financial or economic crises and changes in the gross domestic product, the principal sectors, inflation, employment and labor, and prevailing prices and wages;
- the monetary system, including the monetary policy, the exchange rate policy, the economic and tax policies, banking regulation, credit allocation and exchange controls;
- the external sector, including the amount and types of foreign trade, the geographic distribution of trade, the balance of payments, and reserves and exchange rates;
- public finance, including the budget process, any entry into or termination of any economic or monetary agreement or union, the prevailing accounting methodology, the measures of fiscal balance, revenues and expenditures, and any government enterprise or privatization program; and
- public debt, including external debt, debt service and the debt record.

These factors interrelate in complex ways, and the effect of one factor on the market value of the bonds underlying a Bond Index or Bond Fund may offset or enhance the effect of another factor. Changes in the value of a Bond Index or Bond Fund may adversely affect any payment on the notes.

Risks Relating to a Commodity Index or a Commodity Fund

The commodity futures contracts underlying a Commodity Index or a Commodity Fund are subject to legal and regulatory regimes that may change in ways that could have a substantial adverse effect on the value of the notes and, for notes linked to a Commodity Index, could lead to the early acceleration of your notes.

Futures contracts and options on futures contracts markets, including the futures contracts underlying a Commodity Index or a Commodity Fund, are subject to extensive regulation and margin requirements. The CFTC and the exchanges on which those futures contracts trade are authorized to take extraordinary actions in the event of a market emergency, including, for example, the retroactive implementation of speculative position limits or higher margin requirements, the establishment of daily limits and the suspension of trading. Furthermore, certain exchanges have regulations that limit the amount of fluctuation in futures contract prices that may occur. These limits could adversely affect the market prices of relevant futures contracts and forward contracts. The regulation of commodity transactions in the United States is subject to ongoing modification by governmental and judicial action. In addition, various non-U.S. governments have expressed concern regarding the disruptive effects of speculative trading in the commodity markets and the need to regulate the derivative markets in general. The effect on the value of the notes of any future regulatory change is impossible to predict but could be substantial and adverse to the interests of noteholders.

Notably, with respect to agricultural and exempt commodities as defined in the Commodity Exchange Act (generally, physical commodities such as agricultural commodities, energy commodities and metals), the CFTC has authority to establish limits on the number of positions, other than bona fide hedge positions, that may be held by any person in a commodity through futures contracts, options on futures contracts and other related derivatives, such as swaps, that are economically equivalent to those contracts. In addition, designated contract markets and swap execution facilities, as defined in the Commodity Exchange Act, are authorized to establish and enforce position limits or position accountability requirements on their own markets or facilities, which must be at least as stringent as the CFTC's where CFTC limits also apply.

In October 2020, the CFTC adopted rules to establish revised or new position limits on 25 agricultural, metals and energy commodity derivatives contracts. The limits will apply to a number of commodity futures contracts that may be included in a Commodity Index or held by a Commodity Fund, such as CBOT Soybeans, Soybean Meal and Wheat futures; ICE Futures US Cotton No. 2, Sugar No. 11 and Sugar No. 16 futures; NYMEX Light Sweet Crude Oil, NYMEX NY Harbor USLD Heating Oil, NY Harbor Gasoline Blendstock and Henry Hub Natural Gas futures; and COMEX Gold, Silver and Copper futures and NYMEX Palladium futures. The limits would apply to a person's combined position in the specified 25 futures contracts and options on futures ("core referenced futures contracts"), futures and options on futures directly or indirectly linked to the core referenced futures contracts, and economically equivalent swaps. These rules will come into effect on January 1, 2022 for covered futures and options on futures contracts and January 1, 2023 for covered swaps. The rules may reduce liquidity in the exchange-traded market for those commodity-based futures contracts, which may, in turn, have an adverse effect on any payments on the notes.

For notes linked in whole or in part to a Commodity Index, upon the occurrence of legal or regulatory changes that the calculation agent determines have interfered with the Issuer's or its affiliates' ability to hedge its obligations under the notes, including under the CFTC position limit rules mentioned above, or if for any other reason the Issuer or its affiliates are unable to enter into or maintain hedge positions the calculation agent deems necessary to hedge the Issuer's obligations under the notes, the Issuer may, in its sole and absolute discretion, accelerate your notes. See "— Risks Relating to the Notes Generally — For notes linked in whole or in part to a Commodity Index, if a commodity hedging disruption event occurs, the Issuer may accelerate your notes and adjust the amount of their final payment" above.

Prices for the commodities or commodity futures contracts referenced by a Commodity Index or Commodity Fund may change unpredictably, and commodity futures contract prices may be near zero, zero or negative, in each case affecting the value of the notes in unanticipated ways.

Market prices of commodities tend to be highly volatile and may fluctuate rapidly based on numerous factors, including: changes in supply and demand relationships, governmental programs and policies, national and international monetary, trade, political and economic events, wars and acts of terror, changes in interest and exchange rates, speculation and trading activities in commodities and related contracts, weather, and agricultural, trade, fiscal and exchange control policies. The price volatility of each commodity also affects the value of the futures and forward contracts related to that commodity and therefore its price at any such time. The price of any one commodity may be correlated to a greater or lesser degree with any other commodity and factors affecting the general supply and demand as well as the prices of other commodities may affect the particular commodity in question. The commodities markets are subject to temporary distortions or other disruptions due to various factors, including the lack of liquidity in the markets, the participation of speculators and government regulation and intervention. Many commodities are also highly cyclical. These factors, some of which are specific to the nature of each such commodity, may affect the value of a Commodity Index or Commodity Fund in varying ways, and different factors may cause the values of different commodities or commodity futures contracts referenced by a Commodity Index or Commodity Fund to move in inconsistent directions at inconsistent rates. This, in turn, will affect the value of the notes. It is not possible to predict the aggregate effect of all or any combination of these factors.

In addition, prices of commodity futures contracts may be near zero, zero or negative, which can occur rapidly and unexpectedly. For example, in April 2020, the collapse of demand for fuel following government restrictions on travel contributed to an oversupply of crude oil that rapidly filled most available oil storage facilities. Storage shortages meant that market participants who had contracted to buy and take delivery of crude oil were therefore at risk of default under the terms of the May 2020 NYMEX West Texas Intermediate ("WTI") crude oil futures contract. The critical scarcity of storage forced some market participants to sell their futures contracts at a negative price (effectively paying another market participant to accept delivery of the crude oil referenced by the relevant contracts). As a result, for the first time in history, crude oil futures contracts traded below zero. On April 20, 2020, the last trading day before expiration of the May 2020 WTI crude oil futures contract, prices of that contract fell to negative $37.63. If any commodity futures contract referenced in a Commodity Index or Commodity Fund reaches a near-zero, zero or negative price, the market value of and return on the notes could be adversely affected, potentially severely and in unanticipated ways, and you may lose a significant portion, perhaps all, of your investment in the notes.

Each Commodity Index or Commodity Fund provides one avenue for exposure to commodities. The high volatility and cyclical nature of commodity markets may render these investments inappropriate as the focus of an investment portfolio. See "— The prices of commodities are volatile and are affected by numerous factors, certain of which are specific to the commodity sector for each commodity" for additional information about factors affecting the value of specific commodity sectors.

An investment in the notes may not offer direct exposure to physical commodities.

If the notes are linked to a Commodity Index or a Commodity Fund composed of futures contracts on a commodity, the notes will reflect, in whole or in part, the return on those commodity futures contracts, not the return on the physical commodities underlying those commodity futures contracts. The price of a futures contract reflects the expected value of the commodity upon delivery in the future, whereas the spot price of a commodity reflects the immediate delivery value of the commodity. A variety of factors can lead to a disparity between the expected future price of a commodity and the spot price at a given point in time, such as the cost of storing the commodity for the term of the futures contract, interest charges incurred to finance the purchase of the commodity and expectations concerning supply and demand for the commodity. The price movements of a futures contract are typically correlated with the movements of the spot price of the reference commodity, but the correlation is generally imperfect, and price movements in the spot market may not be reflected in the futures market (and vice versa). Accordingly, the notes may underperform a similar investment that reflects the return on physical commodities.

Suspension or disruptions of market trading in relevant commodity and related futures markets may adversely affect the value of the notes.

The commodity markets are subject to temporary distortions or other disruptions due to various factors, including the lack of liquidity in the markets, the participation of speculators and government regulation and intervention. In addition, U.S. futures exchanges and some foreign exchanges have regulations that limit the amount of fluctuation in futures contract prices that may occur during a single day. These limits are generally referred to as "daily price fluctuation limits," and the maximum or minimum price of a contract on any given day as a result of these limits is referred to as a "limit price." Once the limit price has been reached for a particular contract, no trades may be made at a different price. Limit prices have the effect of precluding trading in a particular contract or forcing the liquidation of contracts at disadvantageous times or prices. These circumstances could affect the level of any

Commodity Index or the price of any Commodity Fund, which may adversely affect the value of your notes.

Changes in the margin requirements for any commodity futures contracts underlying a Commodity Index or a Commodity Fund may adversely affect the value of the notes.

Futures exchanges require market participants to post collateral in order to open and keep open positions in futures contracts. If an exchange changes the amount of collateral required to be posted to hold positions in commodity futures contracts underlying any Commodity Index or Commodity Fund, market participants may adjust their positions, which may affect prices of the relevant commodity futures contracts. As a result, the level of that Commodity Index or the price of that Commodity Fund, as applicable, may be affected, which may adversely affect the value of the notes.

A Commodity Index or a Commodity Fund may be subject to pronounced risks of pricing volatility.

As a general matter, the risk of low liquidity or volatile pricing around the maturity date of a commodity futures contract is greater than in the case of other futures contracts because (among other factors) a number of market participants take physical delivery of the underlying commodities. Many commodities, like those in the energy and industrial metals sectors, have liquid futures contracts that expire every month. Therefore, these contracts are rolled forward every month. Contracts based on certain other commodities, most notably agricultural and livestock products, tend to have only a few contract months each year that trade with substantial liquidity. Thus, these commodities, with related futures contracts that expire infrequently, roll forward less frequently than every month and can have further pronounced pricing volatility during extended periods of low liquidity. The risk of irregular liquidity or pricing around the maturity date of a commodity futures contract is greater than in the case of other futures contracts because (among other factors) a number of market participants take delivery of the underlying commodities. In respect of a Commodity Index or a Commodity Fund that represents energy, it should be noted that due to the significant level of continuous consumption, limited reserves and oil cartel controls, energy commodities are subject to rapid price increases in the event of perceived or actual shortages. These factors (when combined or in isolation) may affect the price of futures contracts and, as a consequence, the level of a Commodity Index or the price of a Commodity Fund and any payment on the notes.

Changes in future prices of commodity futures contracts included in a Commodity Index or held by a Commodity Fund relative to their current prices may lead to a decrease in any payment on the notes.

A Commodity Index is composed of, and a Commodity Fund holds, futures contracts on physical commodities. As the contracts underlying a Commodity Index or a Commodity Fund come to expiration, they are replaced by contracts that have a later expiration. For example, a contract purchased and held in August may specify an October expiration. As time passes, the contract expiring in October is replaced by a contract for delivery in November. This is accomplished by selling the October contract and purchasing the November contract. This process is referred to as "rolling." Excluding other considerations, if the market for the underlying futures contracts is in "contango," where the prices are higher in the distant delivery months than in the nearer delivery months, the purchase of the November contract would take place at a price that is higher than the price of the October contract, thereby creating a negative "roll yield." In addition, excluding other considerations, if the market for the underlying futures contracts is in "backwardation," where the prices are lower in the distant delivery months than in the nearer delivery months, the purchase of the November contract would take place at a price that is lower than the price of the October contract, thereby creating a positive "roll yield."

For notes that provide long (or bullish) exposure to a Commodity Index or Commodity Fund, the presence of contango in the commodity markets could adversely affect the value of that Commodity Index or Commodity Fund and, accordingly, any payment on the notes. In addition, for notes that provide short (or bearish) exposure to a Commodity Index or Commodity Fund, the presence of backwardation in the commodity markets could adversely affect the value of that Commodity Index or Commodity Fund and, accordingly, any payment on the notes.

For notes linked to a Commodity Index, the notes may be linked to an excess return index and not to a total return index.

The notes may be linked to an excess return index and not to a total return index. The return from investing in futures contracts derives from three sources: (a) changes in the price of the relevant futures contracts (which is known as the "price return"); (b) any profit or loss realized when rolling the relevant futures contracts (which is known as the "roll return"); and (c) any interest earned on the cash deposited as collateral for the purchase of the relevant futures contracts (which is known as the "collateral return").

Some commodity indices are excess return indices that measure the returns accrued from investing in uncollateralized futures contracts (*i.e.*, the sum of the price return and the roll return associated with an investment in futures contracts). By contrast, a total return index, in addition to reflecting those returns, also reflects interest that could be earned on funds committed to the trading of the underlying futures contracts (*i.e.*, the collateral return associated with an investment in futures contracts). If the notes provide long (or bullish) exposure to a Commodity Index that is an excess return index, then investing in the notes will not generate the same return as would be generated from investing directly in the relevant futures contracts or in a total return index related to the relevant futures contracts.

For notes that provide short (or bearish) exposure to a Commodity Index that is a total return index, your return on the notes will be adversely affected by any interest earned on the cash deposited as collateral for the purchase of the relevant futures contracts.

The notes may provide short (or bearish) exposure to a Commodity Index that is a total return index. The return from investing in futures contracts derives from three sources: (a) changes in the price of the relevant futures contracts (which is known as the "price return"); (b) any profit or loss realized when rolling the relevant futures contracts (which is known as the "roll return"); and (c) any interest earned on the cash deposited as collateral for the purchase of the relevant futures contracts (which is known as the "collateral return").

Some commodity indices are excess return indices that measure the returns accrued from investing in uncollateralized futures contracts (*i.e.*, the sum of the price return and the roll return associated with an investment in futures contracts). By contrast, a total return index, in addition to reflecting those returns, also reflects interest that could be earned on funds committed to the trading of the underlying futures contracts (*i.e.*, the collateral return associated with an investment in futures contracts). If the notes are linked to a Commodity Index that is a total return index, any interest earned on the cash deposited as collateral for the purchase of the relevant futures contracts will have a positive effect on the level of that index, which will adversely affect the value of the notes.

The prices of commodities are volatile and are affected by numerous factors, certain of which are specific to the commodity sector for each commodity.

A change in the price of any of the commodities upon which the futures contracts underlying a Commodity Index or a Commodity Fund are based may have a material adverse effect on the value of the notes and your return on an investment in the notes. Commodities and commodity futures contracts are subject to the effect of numerous factors, certain of which are specific to the commodity sector for each commodity or commodity futures contract to which your notes provide exposure, as discussed below. The relevant terms supplement or any accompanying underlying supplement may provide additional risk factors relating to any relevant Commodity Index or Commodity Fund.

Agricultural Sector

Global prices of agricultural commodities, including cocoa, coffee, corn, cotton, soybeans, sugar and wheat, are primarily affected by the global demand for and supply of those commodities but are also significantly influenced by speculative actions and by currency exchange rates. In addition, prices for agricultural commodities are affected by governmental programs and policies regarding agriculture, as well as general trade, fiscal and exchange control policies. Extrinsic factors, such as drought, floods, general weather conditions, disease and natural disasters may also affect agricultural commodity prices. Demand for agricultural commodities, such as wheat, corn and soybeans, both for human consumption and as cattle feed, has generally increased with worldwide growth and prosperity.

Energy Sector

Global prices of energy commodities, including WTI crude oil, Brent crude oil, RBOB gasoline, heating oil, gas oil and natural gas, are primarily affected by the global demand for and supply of these commodities, but they are also significantly influenced by speculative actions and by currency exchange rates. In addition, prices for energy commodities are affected by governmental programs and policies, national and international political and economic events, changes in interest and exchange rates, trading activities in commodities and related contracts, trade, fiscal, monetary and exchange control policies, and with respect to oil, drought, floods, weather, government intervention, environmental policies, embargoes and tariffs. Demand for refined petroleum products by consumers, as well as by the agricultural, manufacturing and transportation industries, affects the price of energy commodities. Sudden disruptions in the supplies of energy commodities, such as those caused by war, natural events, accidents or acts of terrorism, may cause prices of energy commodity futures contracts to become extremely volatile and unpredictable. Also, sudden and dramatic changes in the futures market may occur, for example, upon a cessation of hostilities that may exist in countries producing energy commodities, the introduction of new or previously withheld supplies into the market or the introduction of substitute products or commodities. In particular, supplies of crude oil may increase or decrease depending on, among other factors, production decisions by the Organization of the Oil and Petroleum Exporting Countries ("**OPEC**") and other crude oil producers. Crude oil prices are determined with significant influence by OPEC, which has the capacity to influence oil prices worldwide because its members possess a significant portion of the world's oil supply. Crude oil prices are generally more volatile and more subject to dislocation than are prices of other commodities. Demand for energy commodities such as oil and gasoline is generally linked to economic activity and will tend to reflect general economic conditions.

Industrial Metals Sector

Global prices of industrial metals commodities, including aluminum, copper, lead, nickel and zinc, are primarily affected by the global demand for and supply of these commodities, but they are also significantly influenced by speculative actions and by currency exchange rates. Demand for industrial metals is significantly influenced by the level of global industrial economic activity. Prices for industrial metals commodities are affected by governmental programs and policies, national and international political and economic events, changes in interest and exchange rates, trading activities in commodities and related contracts, trade, fiscal, monetary and exchange control policies, government intervention, embargoes and tariffs. An additional, but highly volatile, component of demand for industrial metals is adjustments to inventory in response to changes in economic activity and/or pricing levels, which will influence investment decisions in new mines and smelters. Sudden disruptions in the supplies of industrial metals, such as those caused by war, natural events, accidents, acts of terrorism, transportation problems, labor strikes and shortages of power, may cause prices of industrial metals futures contracts to become extremely volatile and unpredictable. The introduction of new or previously withheld supplies into the market or the introduction of substitute products or commodities will also affect the prices of industrial metals commodities.

Livestock Sector

Livestock commodities, including live cattle, feeder cattle and lean hogs, are "non-storable" commodities, and therefore may experience greater price volatility than traditional commodities. Global livestock commodity prices are primarily affected by the global demand for and supply of those commodities, but are also significantly influenced by speculative actions and by currency exchange rates.

In addition, prices for livestock commodities are affected by governmental programs and policies regarding livestock, as well as general trade, fiscal and exchange control policies. Extrinsic factors, such as drought, floods, general weather conditions, disease (*e.g.*, Bovine Spongiform Encephalopathy, or Mad Cow Disease, and swine influenza), availability of and prices for livestock feed and natural disasters may also affect livestock commodity prices. Demand for livestock commodities has generally increased with worldwide growth and prosperity.

Precious Metals Sector

Global prices of precious metals commodities, including gold, silver, platinum and palladium, are primarily affected by the global demand for and supply of those commodities, but they are also significantly influenced by speculative actions and by currency exchange rates. Demand for precious metals is significantly influenced by the level of global industrial economic activity. Prices for precious metals are affected by governmental programs and policies, national and international political and economic events, expectations with respect to the rate of inflation, changes in interest and exchange rates, trading activities in commodities and related contracts, trade, fiscal, monetary and exchange control policies, government intervention, embargoes and tariffs. Sudden disruptions in the supplies of precious metals, such as those caused by war, natural events, accidents, acts of terrorism, transportation problems, labor strikes and shortages of power, may cause prices of precious metals futures contracts to become extremely volatile and unpredictable. In addition, prices for precious metals can be affected by numerous other factors, including jewelry demand and production levels.

A separate underlying supplement or the relevant terms supplement may provide additional risk factors relating to any Underlying to which the notes are linked.

USE OF PROCEEDS AND HEDGING

Unless otherwise specified in the relevant terms supplement, the net proceeds JPMorgan Chase & Co. receives from the sale of the notes it issues will be used for general corporate purposes and, in part, by JPMorgan Chase & Co. or by one or more of its affiliates in connection with hedging its obligations under the notes. Unless otherwise specified in the relevant terms supplement, JPMorgan Financial intends to lend the net proceeds from the sale of the notes it issues to the Guarantor and/or its affiliates. The Guarantor expects that it and/or its affiliates will use the proceeds from these loans to provide additional funds for its and/or their operations and for other general corporate purposes. The notes will be offered to meet investor demand for products that reflect the risk-return profile and market exposure provided by the notes as set forth in the relevant terms supplement.

Unless otherwise specified in the relevant terms supplement, the original issue price of the notes will be equal to the estimated value of the notes plus the selling commissions, referral fees, if any, and structuring fees, if any, paid to each agent and/or other affiliated or unaffiliated dealers (as shown on the cover page of the relevant terms supplement), plus (minus) the projected profits (losses) that the Issuer's affiliates expect to realize for assuming risks inherent in hedging its obligations under the notes, plus the estimated cost of hedging its obligations under the notes. See "Estimated Value and Secondary Market Prices of the Notes — The Estimated Value of the Notes" and the relevant terms supplement for additional information about the estimated value of the notes. See also "Use of Proceeds" in the prospectus.

On or prior to the date of the relevant terms supplement, the Issuer, through its affiliates or others, expects to hedge some or all of its anticipated exposure in connection with the notes. In addition, from time to time after the notes are issued, the Issuer, through its affiliates or others, may enter into additional hedging transactions and close out or unwind those the Issuer has entered into, in connection with the notes and possibly in connection with its or its affiliates' exposure to one or more Underlying Stocks, Indices or Funds or the securities, commodities, futures contracts or other assets or market measures underlying one or more Indices or Funds or related currency exchange rates. To accomplish this, the Issuer, through its affiliates or others, may take positions in one or more Underlying Stocks, Indices or Funds, the securities, commodities, futures contracts or other assets or market measures underlying one or more Indices or Funds or related currency exchange rates, or instruments the value of which is derived from one or more Underlying Stocks, Indices or Funds or the securities, commodities, futures contracts or other assets or market measures underlying one or more Indices or Funds or related currency exchange rates. From time to time, prior to maturity of the notes, the Issuer may pursue a dynamic hedging strategy that may involve taking long or short positions in the instruments described above.

While the Issuer cannot predict an outcome, any of these hedging activities or other trading activities of the Issuer could potentially affect the value of the Underlying(s) in a manner that adversely affects the value of the notes or any payment on the notes. Because hedging the Issuer's obligations entails risk and may be influenced by market forces beyond its control, this hedging may result in a profit that is more or less than expected, or it may result in a loss. It is possible that these hedging or trading activities could result in substantial returns for the Issuer or its affiliates while the value of the notes declines. See "Risk Factors — Risks Relating to Conflicts of Interest — The Issuer, the Guarantor (if applicable) or their affiliates may have economic interests that are adverse to those of the holders of the notes as a result of their hedging and other trading activities" above.

The Issuer has no obligation to engage in any manner of hedging activity and will do so solely at its discretion and for its own account. The Issuer may hedge its exposure on the notes directly or it may aggregate this exposure with other positions taken by it and its affiliates with respect to its exposure to one or more Underlying Stocks, Indices or Funds or the securities, commodities, futures contracts or other assets or market measures underlying one or more Indices or Funds or related currency exchange rates. No note holder will have any rights or interest in the Issuer's hedging activity or any positions that the Issuer or any unaffiliated counterparties may take in connection with the Issuer's hedging activity.

GENERAL TERMS OF NOTES

Calculation Agent

Unless otherwise specified in the relevant terms supplement, J.P. Morgan Securities LLC, one of the Issuer's and the Guarantor's (if applicable) affiliates, will act as the calculation agent. The Issuer and the Guarantor (if applicable) may appoint a different calculation agent from time to time after the date of the relevant terms supplement without your consent and without notifying you.

The calculation agent will make all necessary calculations and determinations in connection with the notes, including calculations and determinations relating to any payments on the notes and the assumptions used to determine the pricing and estimated value of the notes. All determinations made by the calculation agent will be at the sole discretion of the calculation agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on the Issuer and the Guarantor (if applicable).

The calculation agent will provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, of any amount payable on the notes at or prior to 11:00 a.m., New York City time, on the date on which payment is to be made.

Unless otherwise specified in the relevant terms supplement, all values of an Underlying or values to which the value of the Underlying may be compared in the determination of any payment on the notes will be rounded to the nearest one-hundredth, with five one-thousandths rounded upward (*e.g.*, 0.545 would be rounded to 0.55) and all other values with respect to calculations in connection with the notes will be rounded to the nearest one hundred-thousandth, with five one-millionths rounded upward (*e.g.*, 0.876545 would be rounded to 0.87655). Notwithstanding the foregoing, all dollar amounts related to determination of any payment on the notes per note will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (*e.g.*, 0.76545 would be rounded up to 0.7655), and all dollar amounts payable, if any, on the aggregate principal amount of notes per holder will be rounded to the nearest cent, with one-half cent rounded upward unless otherwise specified in the relevant terms supplement.

Postponement of a Payment Date

If any scheduled Payment Date is not a business day, then that Payment Date will be the next succeeding business day following the scheduled Payment Date. If, due to a market disruption event or otherwise, any Determination Date referenced in the determination of a payment on the notes that will or may be payable on any Payment Date is postponed so that it falls less than two business days prior to that scheduled Payment Date, that Payment Date will be the second business day following the latest such Determination Date, as postponed, unless otherwise specified in the relevant terms supplement. If any Payment Date is adjusted as the result of a non-business day, a market disruption event or otherwise, any payment of interest due on that Payment Date will be made on that Payment Date as adjusted, with the same force and effect as if that Payment Date had not been adjusted, but no interest will accrue or be payable as a result of the delayed payment.

A "**business day**" is, unless otherwise specified in the relevant terms supplement, any day other than a day on which banking institutions in the City of New York are authorized or required by law, regulation or executive order to close or a day on which transactions in U.S. dollars are not conducted.

Postponement of a Determination Date

For notes linked to an Index, the relevant terms supplement or an accompanying underlying supplement may provide a formulation of the postponement provisions that will apply to the notes instead of the relevant provisions set forth below.

Notes Linked to a Single Underlying

Notes Linked to a Single Underlying (Other Than a Commodity Index). For notes linked to a single Underlying that is not a Commodity Index, if a Determination Date is a Disrupted Day (as defined below), the applicable Determination Date will be postponed to the immediately succeeding scheduled trading day (as defined below) that is not a Disrupted Day.

In no event, however, will any Determination Date be postponed to a date that is after the applicable Final Disrupted Determination Date (as defined below). If a Determination Date has been postponed to the applicable Final Disrupted Determination Date and that day is a Disrupted Day, the calculation agent will determine the closing price or closing level, as applicable, of the Underlying (the "**Underlying Value**") for that Determination Date on that Final Disrupted Determination Date:

(a) for notes linked to an Underlying Stock or a Fund, in good faith based on the calculation agent's assessment of the market value of one share of that Underlying Stock or Fund, as applicable, on that Final Disrupted Determination Date;

(b) for notes linked to an Equity Index, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, in accordance with the formula for and method of calculating the closing level of that Index last in effect prior to the commencement of the market disruption event (or prior to the non-trading day), using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, the calculation agent's good faith estimate of the closing price that would have prevailed but for that suspension or limitation or non-trading day) on that Final Disrupted Determination Date of each security most recently constituting that Index; and

(c) for notes linked to a Bond Index, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, in good faith and in a commercially reasonable manner.

Notes Linked to a Single Commodity Index. For notes linked to a single Underlying that is a Commodity Index, if a Determination Date is a Disrupted Day, the applicable Determination Date will be postponed to the earlier of the immediately succeeding scheduled trading day that is not a Disrupted Day and the applicable Final Disrupted Determination Date, and the closing level of the Index on that postponed Determination Date will be deemed to be the Adjusted Closing Level (as defined below) of the Index with respect to the originally scheduled Determination Date.

For purposes of this "— Notes Linked to a Single Underlying" section, with respect to a Determination Date, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the "**Final Disrupted Determination Date**" means the tenth scheduled trading day after that Determination Date, as originally scheduled.

Notes Linked to Multiple Underlyings

For notes linked to multiple Underlyings, if a Determination Date is a Disrupted Day for any Underlying (any Underlying affected by a Disrupted Day, a "**Disrupted Underlying**"), the applicable Determination Date will be postponed to the earliest day on which the Underlying Value of each Underlying has been established, as described below:

(a) for each Underlying that is not a Disrupted Underlying (an "**Unaffected Underlying**"), the Underlying Value on the postponed Determination Date will be deemed to be the Underlying Value on the originally scheduled Determination Date;

(b) for each Disrupted Underlying that is not a Commodity Index, the Underlying Value on the postponed Determination Date will be deemed to be the Underlying Value on the first scheduled trading day immediately following the originally scheduled Determination Date that is not a Disrupted Day for that Disrupted Underlying; and

(c) for each Disrupted Underlying that is a Commodity Index, the Underlying Value on the postponed Determination Date will be deemed to be the Adjusted Closing Level of that Index with respect to the originally scheduled Determination Date.

Accordingly, if a Determination Date is postponed as described above, the calculation agent may reference the Underlying Values of the Underlyings from different days when making any determinations with respect to that Determination Date, as postponed.

For example, assume that the notes are linked to three Underlyings that are not Commodity Indices, Underlying A, Underlying B and Underlying C, and that:

(a) Scheduled Trading Day 1, a scheduled Determination Date, is not a Disrupted Day for Underlying A, but is a Disrupted Day for Underlyings B and C;

(b) Scheduled Trading Day 2 is not a Disrupted Day for Underlying B, but is a Disrupted Day for Underlying C; and

(c) Scheduled Trading Day 3 is not a Disrupted Day for Underlying C.

Under these circumstances, the Determination Date originally scheduled to occur on Scheduled Trading Day 1 would be postponed to Scheduled Trading Day 3 and, with respect to that Determination Date, as postponed, the Underlying Values would be deemed to be (a) for Underlying A, the Underlying Value on Scheduled Trading Day 1; (b) for Underlying B, the Underlying Value on Scheduled Trading Day 2; and (c) for Underlying C, the Underlying Value on Scheduled Trading Day 3.

In no event, however, will any Determination Date be postponed to a date that is after the applicable Final Disrupted Determination Date. If a Determination Date has been postponed to the applicable Final Disrupted Determination Date and on that day, the Underlying Value for any Disrupted Underlying has not been established in accordance with the first paragraph of this "— Notes Linked to Multiple Underlyings" section (a "**Final Disrupted Underlying**"), the Underlying Value for that Determination Date will be determined by the calculation agent on that Final Disrupted Determination Date and will be deemed to be:

(a) for each Unaffected Underlying, the Underlying Value on the originally scheduled Determination Date;

(b) for each Disrupted Underlying that is not a Final Disrupted Underlying, the Underlying Value determined in the manner described in the first paragraph of this "— Notes Linked to Multiple Underlyings" section;

(c) for each Final Disrupted Underlying that is an Underlying Stock or a Fund, the closing price of one share of that Underlying Stock or Fund, as applicable, determined by the calculation agent in good faith based on the calculation agent's assessment of the market value of one share of that Underlying Stock or Fund, as applicable, on that Final Disrupted Determination Date; and

(d) for each Final Disrupted Underlying that is an Index, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement:

(i) with respect to an Equity Index, the closing level of that Index determined by the calculation agent in accordance with the formula for and method of calculating the closing level of that Index last in effect prior to the commencement of the market disruption event (or prior to the non-trading day), using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, the calculation agent's good faith estimate of the closing price that would have prevailed but for that suspension or limitation or non-trading day) on that Final Disrupted Determination Date of each security most recently constituting that Index;

(ii) with respect to a Bond Index, the closing level of that Index on that Final Disrupted Determination Date determined by the calculation agent in good faith and in a commercially reasonable manner; and

(iii) with respect to a Commodity Index, the Adjusted Closing Level of that Index with respect to the originally scheduled Determination Date.

For purposes of this "— Notes Linked to Multiple Underlyings" section, with respect to a Determination Date, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the "**Final Disrupted Determination Date**" means the tenth scheduled trading day after that Determination Date, as originally scheduled, for each of the Underlyings (or, if that tenth scheduled trading day is not the same day for each of the Underlyings, the latest of those tenth scheduled trading days).

Adjusted Closing Level of a Commodity Index

The "**Adjusted Closing Level**" of a Commodity Index with respect to a Determination Date that is a Disrupted Day will be determined by the calculation agent and will be calculated in accordance with the formula for and method of calculating the closing level of that Index last in effect prior to the originally scheduled Determination Date, using:

(a) with respect to each Unaffected Index Contract, the official settlement price of that Unaffected Index Contract as of the originally scheduled Determination Date (including any delayed publication of that official settlement price for the originally scheduled Determination Date that occurred on or prior to the determination of the postponed Determination Date); and

(b) with respect to each Affected Index Contract, the official settlement price of that Affected Index Contract on the first scheduled trading day immediately following the originally scheduled Determination Date that is not a Disrupted Day with respect to any Relevant Index Contract with respect to that Affected Index Contract, *provided* that if each day from and including the originally scheduled Determination Date to and excluding the applicable Final Disrupted Determination Date is a Disrupted Day with respect to any such Relevant Index Contract, the price of each such Relevant Index Contract will be determined in good faith based on the calculation agent's assessment of the official settlement price of that Affected Index Contract on that Final Disrupted Determination Date.

With respect to a Determination Date that is a Disrupted Day, a futures contract included in an Index is an "**Unaffected Index Contract**" if no Relevant Index Contract with respect to that futures contract is affected by that Disrupted Day.

With respect to a Determination Date that is a Disrupted Day, a futures contract included in an Index is an "**Affected Index Contract**" if any Relevant Index Contract with respect to that futures contract is affected by that Disrupted Day.

With respect to a futures contract included in an Index, a "**Relevant Index Contract**" means any futures contract included in that Index that references the same commodity as that futures contract (including that futures contract), in accordance with the published methodology of that Index.

Additional Defined Terms

Unless otherwise specified in the relevant terms supplement, a "**Disrupted Day**" means (a) with respect to an Underlying, a day that is not a trading day with respect to that Underlying or a day on which a market disruption event occurs or is continuing with respect to that Underlying and (b) with respect to a

Relevant Index Contract for a futures contract included in a Commodity Index, a day that is not a trading day with respect to that Commodity Index or a day on which a market disruption event that affects that Relevant Index Contract occurs or is continuing.

For additional information about market disruption events, see "The Underlyings" section below.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, a "**scheduled trading day**" is:

(a) with respect to an Underlying Stock, a Fund or any successor fund, a day, as determined by the calculation agent, on which each of the following exchanges is scheduled to be open for trading for their respective regular trading sessions: (i) the relevant exchange for that Underlying Stock, Fund or successor fund, as applicable, and (ii) the exchanges on which futures or options contracts related to that Underlying Stock, Fund or successor fund, as applicable, are traded; or, with respect to a security issued by a foreign issuer that is not listed or admitted to trading on a U.S. securities exchange or market, a day, as determined by the calculation agent, on the primary non-U.S. securities exchange or market on which that security is listed or admitted to trading is scheduled to be open for trading for its regular trading session;

(b) with respect to an Equity Index or any relevant successor index, a day, as determined by the calculation agent, on which each of the following exchanges is scheduled to be open for trading for their respective regular trading sessions: (i) the relevant exchanges for securities underlying that Index or successor index, as applicable, and (ii) the exchanges on which futures or options contracts related to that Index or successor index, as applicable, are traded; and

(c) with respect to a Bond Index, a Commodity Index or any relevant successor index, a day, as determined by the calculation agent, on which that Index or successor index, as applicable, is scheduled to be published by the sponsor or calculation agent of that Index or successor index, as applicable, in accordance with the index rules or methodology that governs that Index or successor index, as applicable.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, a "**trading day**" is:

(a) with respect to an Underlying Stock, a Fund or any successor fund, a day, as determined by the calculation agent, on which trading is generally conducted on (i) the relevant exchange for that Underlying Stock, Fund or successor fund, as applicable, and (ii) the exchanges on which futures or options contracts related to that Underlying Stock, Fund or successor fund, as applicable, are traded; or, with respect to a security issued by a foreign issuer that is not listed or admitted to trading on a U.S. securities exchange or market, a day, as determined by the calculation agent, on which trading is generally conducted on the primary non-U.S. securities exchange or market on which that security is listed or admitted to trading;

(b) with respect to an Equity Index or any relevant successor index, a day, as determined by the calculation agent, on which trading is generally conducted on (i) the relevant exchanges for securities underlying that Index or successor index, as applicable, and (ii) the exchanges on which futures or options contracts related to that Index or successor index, as applicable, are traded; and

(c) with respect to a Bond Index, a Commodity Index or any relevant successor index, a day, as determined by the calculation agent, on which that Index or successor index, as applicable, is published by the sponsor or calculation agent of that Index or successor index, as applicable, in accordance with the index rules or methodology that governs that Index or successor index, as applicable.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, "**relevant exchange**" means:

(a) with respect to an Underlying Stock, an Underlying ADS Stock, a Fund or any successor fund, the primary exchange or market for trading for the shares of that Underlying Stock, Underlying ADS Stock, Fund or successor fund, as applicable;

(b) with respect to an Index, any relevant successor index or any Underlying Index, the primary exchange or market of trading for any security, commodity, futures contract or other asset or market measure (or any combination thereof) then included in that Index, successor index or Underlying Index, as applicable; and

(c) with respect to any Relevant Index Contract, the primary exchange or market of trading for that futures contract.

Consequences of a Commodity Hedging Disruption Event

Unless otherwise specified in any accompanying underlying supplement, for notes linked in whole or in part to a Commodity Index, the relevant terms supplement will specify that, if a commodity hedging disruption event occurs, the Issuer will have the right, but not the obligation, to accelerate the payment on the notes. If a commodity hedging disruption event occurs and the Issuer chooses to exercise this right, (a) the Issuer will provide, or cause the calculation agent to provide, written notice of the Issuer's election to exercise this right to the trustee, on which notice the trustee may conclusively rely, at its New York office, and to DTC, as holder of the notes, (b) the amount due and payable per note upon early acceleration will be determined by the calculation agent in good faith and in a commercially reasonable manner on the date on which the Issuer (or the calculation agent) delivers notice of acceleration and (c) that amount will be payable on the fifth business day following the date on which the Issuer (or the calculation agent) delivers notice of acceleration, and the maturity date will be accelerated to that fifth business day.

The Issuer will provide, or will cause the calculation agent to provide, written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, and to DTC of the cash amount due with respect to the notes as promptly as possible and in no event later than two business days prior to the date on which payment is due.

A "**commodity hedging disruption event**," unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, means that:

(a) due to (i) the adoption of, or any change in, any applicable law, regulation, rule or order (including, without limitation, any tax law); or (ii) the promulgation of, or any change in, the interpretation, application, exercise or operation by any court, tribunal, regulatory authority, exchange or trading facility or any other relevant entity with competent jurisdiction of any applicable law, rule, regulation, order, decision or determination (including, without limitation, as implemented by the CFTC or any exchange or trading facility), in each case occurring on or after the pricing date, the calculation agent determines in good faith that it is contrary (or upon adoption, it will be contrary) to that law, rule, regulation, order, decision or determination for the Issuer to purchase, sell, enter into, maintain, hold, acquire or dispose of its or its affiliates' (A) positions or contracts in securities, options, futures, derivatives or foreign exchange or (B) other instruments or arrangements, in each case, in order to hedge its obligations under the notes (in the aggregate on a portfolio basis or incrementally on a trade by trade basis) ("**hedge positions**"), including (without limitation) if those hedge positions (in whole or in part) are (or, but for the consequent disposal thereof, would otherwise be) in excess of any allowable position limit(s) in relation to any commodity traded on any exchange(s) or other trading facility (it being within the sole and absolute discretion of the calculation agent to determine which of the hedge positions are counted towards that limit); or

(b) for any reason, the Issuer or its affiliates are unable, after using commercially reasonable efforts, to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) the calculation agent deems necessary to hedge the risk of entering into and performing the Issuer's commodity-related obligations with respect to the notes, or (ii) realize, recover or remit the proceeds of any of those transaction(s) or asset(s).

Please see "Risk Factors — Risks Relating to a Commodity Index or a Commodity Fund — The commodity futures contracts underlying a Commodity Index or a Commodity Fund are subject to legal and regulatory regimes that may change in ways that could have a substantial adverse effect on the value of the notes and, for notes linked to a Commodity Index, could lead to the early acceleration of your notes" for more information.

Events of Default

Under the heading "Description of Debt Securities — Events of Default and Waivers" in the prospectus is a description of events of default relating to debt securities including the notes.

Payment upon an Event of Default

Unless otherwise specified in the relevant terms supplement, in case an event of default with respect to the notes shall have occurred and be continuing, if the notes do not include an automatic redemption feature, the amount declared due and payable per note upon any acceleration of the notes will be determined by the calculation agent and will be an amount in cash equal to the amount payable at maturity per note calculated in the manner described in the relevant terms supplement and calculated as if the date of acceleration were (a) the final Determination Date and (b) the Final Disrupted Determination Date for the final Determination Date (if the date of acceleration is a Disrupted Day).

Unless otherwise specified in the relevant terms supplement, in case an event of default with respect to the notes shall have occurred and be continuing, if the notes include an automatic redemption feature, the amount declared due and payable per note upon any acceleration of the notes will be determined by the calculation agent and will be (1) if (a) the date of acceleration is a Determination Date for the automatic redemption feature and the conditions for an automatic redemption would have been satisfied on the date of acceleration or (b) the date of acceleration is not a Determination Date for the automatic redemption feature, but the conditions for an automatic redemption would have been satisfied on the date of acceleration if the date of acceleration were the next succeeding Determination Date for the automatic redemption feature, an amount in cash equal to the amount payable upon an automatic redemption per note calculated in the manner described in the relevant terms supplement and calculated as if the date of acceleration were (i) that Determination Date and (ii) the Final Disrupted Determination Date for that Determination Date, or (2) in all other circumstances, an amount in cash equal to the amount payable at maturity per note calculated in the manner described in the relevant terms supplement and calculated as if the date of acceleration were (a) the final Determination Date and (b) the Final Disrupted Determination Date for the final Determination Date (if the date of acceleration is a Disrupted Day).

Unless otherwise specified in the relevant terms supplement, any amount payable as described in the two immediately preceding paragraphs will include any accrued and unpaid interest on the notes; *provided* that any interest payable will be prorated based on the ratio of the actual number of days from and including the previous interest payment date to but excluding the date of acceleration over the number of days from and including the previous interest payment date to but excluding the next scheduled interest payment date.

If the final value of an Underlying is determined on more than one Determination Date, then, for each Determination Date scheduled to occur after the date of acceleration, the trading days immediately preceding the date of acceleration (in such number equal to the number of the Determination Dates in excess of one) will be the corresponding Determination Dates, unless otherwise specified in the relevant terms supplement.

The amount determined as described above will constitute the final payment on the notes, and no additional amounts will accrue with respect to the notes following the date of acceleration, regardless of any performance of the Underlying(s) following the date of acceleration.

If the maturity of the notes is accelerated because of an event of default as described above, the Issuer will, or will cause the calculation agent to, provide written notice to the trustee at its New York office, on which notice the trustee may conclusively rely, and to DTC, as holder of the notes, of the cash amount due with respect to the notes as promptly as possible and in no event later than two business days after the date of acceleration.

Modification

Under the heading "Description of Debt Securities — Modification of the Indenture" in the prospectus is a description of when the consent of each affected holder of debt securities is required to modify the indenture.

Defeasance

The provisions described in the prospectus under the heading "Description of Debt Securities — Discharge, Defeasance and Covenant Defeasance" are not applicable to the notes, unless otherwise specified in the relevant terms supplement.

Listing

The notes will not be listed on any securities exchange, unless otherwise specified in the relevant terms supplement.

Book-Entry Only Issuance — The Depository Trust Company

DTC will act as securities depositary for the notes. The notes will be issued only as fully registered securities registered in the name of Cede & Co. (DTC's nominee). One or more fully registered global note certificates, representing the total aggregate principal amount of the notes, will be issued and will be deposited with DTC. See the descriptions contained in the prospectus supplement under the heading "Description of Notes — Forms of Notes" and in the prospectus under the heading "Forms of Securities — Book-Entry System."

Registrar, Transfer Agent and Paying Agent

Payment of amounts due at maturity on the notes will be payable and the transfer of the notes will be registrable at the principal corporate trust office of The Bank of New York Mellon in the City of New York.

The Bank of New York Mellon or one of its affiliates will act as registrar and transfer agent for the notes. The Bank of New York Mellon will also act as paying agent for the notes and may designate additional paying agents.

Registration of transfers of the notes will be effected without charge by or on behalf of The Bank of New York Mellon but upon payment (with the giving of such indemnity as The Bank of New York Mellon may require) in respect of any tax or other governmental charges that may be imposed in relation to it.

Governing Law

The notes will be governed by and interpreted in accordance with the laws of the State of New York.

Reopening Issuances

The Issuer may, in its sole discretion, "reopen" the notes based upon market conditions and the value of the Underlying(s) at that time. The Issuer intends to issue the notes initially in an amount having the aggregate offering price specified on the cover of the relevant terms supplement. However, the Issuer may issue additional notes in amounts that exceed the amount on the cover at any time, without your consent and without notifying you. The notes do not limit the Issuer's ability to incur other indebtedness or to issue other securities. Also, the Issuer is not subject to financial or similar restrictions by the terms of the notes. These further issuances, if any, will be consolidated to form a single sub-series with the originally issued notes, will have the same CUSIP number and will trade interchangeably with the notes immediately upon settlement. Any notes bearing the same CUSIP number that are issued pursuant to any future additional issuances of notes bearing the same CUSIP number will increase the aggregate principal amount of the outstanding notes of this series. The price of any additional offering will be determined at the time of pricing of that offering.

The Issuer has no obligation to take your interests into account when deciding whether to issue additional notes. In addition, the Issuer is under no obligation to reopen any series of notes or to issue any additional notes.

THE UNDERLYINGS

Underlying Stocks

If the notes are linked to any Underlying Stock, the relevant terms supplement will provide summary information regarding the business of the issuer of that Underlying Stock based on its publicly available documents, without independent verification.

Unless otherwise specified in the relevant terms supplement, companies with securities registered under the Exchange Act are required to file periodically certain financial and other information specified by the SEC. Information provided to or filed with the SEC can be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, NE, Washington, DC 20549, and copies of those materials can be obtained from the Public Reference Section of the SEC, 100 F Street, NE, Washington, DC 20549, at prescribed rates. In addition, information provided to or filed with the SEC electronically can be accessed through a website maintained by the SEC. The address of the SEC's website is http://www.sec.gov. Information regarding the issuer of any Underlying Stock may also be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents.

This product supplement and the relevant terms supplement relate only to the notes offered thereby and do not relate to any Underlying Stock or other securities of the issuer of any Underlying Stock. All disclosures contained in the relevant terms supplement regarding the issuer of any Underlying Stock will be derived from publicly available documents and other publicly available information, without independent verification. The Issuer and the Guarantor (if applicable) have not participated, and will not participate, in the preparation of those documents, and the Issuer and the Guarantor (if applicable) have not made, and will not make, any due diligence inquiry with respect to the issuer of any Underlying Stock in connection with the offering of the notes. The Issuer and the Guarantor (if applicable) do not make any representation that those publicly available documents or any other publicly available information regarding the issuer of any Underlying Stock is accurate or complete, and the Issuer and the Guarantor (if applicable) are not responsible for public disclosure of information by the issuer of any Underlying Stock, whether contained in filings with the SEC or otherwise. The Issuer and the Guarantor (if applicable) also cannot give any assurance that all events occurring prior to the date of the relevant terms supplement (including events that would affect the accuracy or completeness of the publicly available documents of the issuer of any Underlying Stock) that would affect the value of any Underlying Stock will have been publicly disclosed. Subsequent disclosure of any of these events or the disclosure of, or failure to disclose, material future events concerning the issuer of any Underlying Stock could affect the market value of the notes or any payment on the notes. Any prospective purchaser of the notes should undertake an independent investigation of the issuer of any Underlying Stock as in its judgment is appropriate to make an informed decision with respect to an investment in the notes.

Price of One Share of an Underlying Stock

Unless otherwise specified in the relevant terms supplement, the "**closing price**" of one share of an Underlying Stock (or one unit of any other security for which a closing price must be determined) on any relevant day means:

- if that Underlying Stock (or that security) is listed or admitted to trading on a national securities exchange, the last reported sale price, regular way (or, in the case of The NASDAQ Stock Market, the official closing price), of the principal trading session on that day on the principal U.S. securities exchange registered under the Exchange Act on which that Underlying Stock (or that security) is listed or admitted to trading;
- if that Underlying Stock (or that security) is not listed or admitted to trading on any national securities exchange but is included in the OTC Bulletin Board Service (or any successor service)

operated by Financial Industry Regulatory Authority, Inc. (the "**FINRA**") (the "**OTC Bulletin Board**"), the last reported sale price of the principal trading session on the OTC Bulletin Board on that day;

- if that Underlying Stock (or that security) is issued by a foreign issuer and its closing price cannot be determined as set forth in the two bullet points above, and that Underlying Stock (or that security) is listed or admitted to trading on a non-U.S. securities exchange or market, the last reported sale price, regular way, of the principal trading session on that day on the primary non-U.S. securities exchange or market on which that Underlying Stock (or that security) is listed or admitted to trading; or
- otherwise, if none of the above circumstances is applicable, the mean, as determined by the calculation agent, of the bid prices for that Underlying Stock (or that security) obtained from as many dealers in that Underlying Stock (or that security), but not exceeding three, as will make such bid prices available to the calculation agent. Bids of any of the Issuer's or the Guarantor's (if applicable) affiliates may be included in the calculation of the mean, but only to the extent that any of those bids is not the highest or the lowest of the bids obtained,

in each case *multiplied* by the then-current Stock Adjustment Factor, subject to the provisions of "General Terms of Notes — Postponement of a Determination Date" above and "— Reorganization Events" below. The relevant terms supplement may refer to the closing price of one share of an Underlying Stock as the closing value of that Underlying Stock.

Unless otherwise specified in the relevant terms supplement, the "**trading price**" for one share of an Underlying Stock (or one unit of any other security for which a trading price must be determined) at any time on any relevant day means:

- if that Underlying Stock (or that security) is listed or admitted to trading on a national securities exchange, the most recently reported sale price, regular way, at that time during the principal trading session on that day on the principal U.S. securities exchange registered under the Exchange Act, on which that Underlying Stock (or that security) is listed or admitted to trading;
- if that Underlying Stock (or that security) is not listed or admitted to trading on any national securities exchange but is included in the OTC Bulletin Board, the most recently reported sale price at that time during the principal trading session on the OTC Bulletin Board on that day; or
- if that Underlying Stock (or that security) is issued by a foreign issuer and its trading price cannot be determined as set forth in the two bullet points above, and that Underlying Stock (or that security) is listed or admitted to trading on a non-U.S. securities exchange or market, the most recently reported sale price, regular way, at that time during the principal trading session on that day on the primary non-U.S. securities exchange or market on which that Underlying Stock (or that security) is listed or admitted to trading,

in each case *multiplied* by the then-current Stock Adjustment Factor, subject to the provisions of "— Reorganization Events" below.

Unless otherwise specified in the relevant terms supplement, with respect to an Underlying Stock, the "**Stock Adjustment Factor**" will be set initially at 1.0, subject to adjustment upon the occurrence of certain corporate events affecting that Underlying Stock. See "— Anti-Dilution Adjustments" and "— Reorganization Events" below.

Market Disruption Events for an Underlying Stock

With respect to an Underlying Stock (or any security for which a closing price must be determined), a "**market disruption event**," unless otherwise specified in the relevant terms supplement, means:

- the occurrence or existence of a suspension, absence or material limitation of trading of that Underlying Stock (or that security) on the relevant exchange for that Underlying Stock (or that security) for more than two hours of trading during, or during the one-half hour period preceding the close of, the principal trading session on that relevant exchange;

- a breakdown or failure in the price and trade reporting systems of the relevant exchange for that Underlying Stock (or that security) as a result of which the reported trading prices for that Underlying Stock (or that security) during the one-half hour period preceding the close of the principal trading session on that relevant exchange are materially inaccurate;

- the occurrence or existence of a suspension, absence or material limitation of trading on the primary exchange or market for trading in futures or options contracts related to that Underlying Stock (or that security), if available, during the one-half hour period preceding the close of the principal trading session on that exchange or market; or

- a decision to permanently discontinue trading in those related futures or options contracts,

in each case, as determined by the calculation agent in its sole discretion; and

- a determination by the calculation agent in its sole discretion that the applicable event described above materially interfered with the Issuer's ability or the ability of any of its affiliates to adjust or unwind all or a material portion of any hedge with respect to the notes.

For purposes of determining whether a market disruption event with respect to an Underlying Stock (or any security for which a closing price must be determined) has occurred, unless otherwise specified in the relevant terms supplement:

- a limitation on the hours or number of days of trading will not constitute a market disruption event if it results from an announced change in the regular business hours of the relevant exchange or the primary exchange or market for trading in futures or options contracts related to that Underlying Stock (or that security);

- limitations pursuant to the rules of any relevant exchange similar to NYSE Rule 80B (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to NYSE Rule 80B as determined by the calculation agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading;

- a suspension of trading in futures or options contracts on that Underlying Stock (or that security) by the primary exchange or market for trading in those contracts, if available, by reason of:

  - a price change exceeding limits set by that exchange or market,

  - an imbalance of orders relating to those contracts or

  - a disparity in bid and ask quotes relating to those contracts

  will, in each case, constitute a suspension, absence or material limitation of trading in futures or options contracts related to that Underlying Stock (or that security); and

- a "suspension, absence or material limitation of trading" on the relevant exchange or on the primary exchange or market on which futures or options contracts related to that Underlying Stock (or that security) are traded will not include any time when that exchange or market is itself closed for trading under ordinary circumstances.

Anti-Dilution Adjustments

The Stock Adjustment Factor for an Underlying Stock is subject to adjustment by the calculation agent as a result of the anti-dilution adjustments described in this section. The adjustments described below do not cover all events that could affect the value of the notes. The Issuer describes the risks relating to dilution above under "Risk Factors — Risks Relating to an Underlying Stock — Anti-dilution protection is limited and may be discretionary."

How Adjustments Will Be Made

If one of the events described below occurs with respect to an Underlying Stock and the calculation agent determines that the event has a dilutive or concentrative effect on the theoretical value of that Underlying Stock, the calculation agent will calculate the corresponding adjustment or series of adjustments to the applicable Stock Adjustment Factor of that Underlying Stock as the calculation agent determines appropriate to account for that dilutive or concentrative effect. For example, if an adjustment is required because of a two-for-one stock split, then the applicable Stock Adjustment Factor will be doubled and, following that adjustment, the closing price and, if applicable, the trading price of one share of that Underlying Stock will be twice what those prices would have been in the absence of that adjustment. The calculation agent will also determine the effective date(s) of any adjustment or series of adjustments it chooses to make and the replacement of an Underlying Stock, if applicable, in the event of a consolidation or merger of the issuer of that Underlying Stock with another entity. See "— Reorganization Events" below. The calculation agent will provide information as to any adjustments to the Stock Adjustment Factor for an Underlying Stock upon written request by any investor in the notes.

Notwithstanding anything to the contrary in this product supplement, if under the provisions below or in the following "— Reorganization Events" section, the calculation agent would make more than one adjustment on the same day, the calculation agent in good faith may make adjustments or a series of adjustments that differ from, or that are in addition to, those described below or under the following "— Reorganization Events" section with a view to offsetting, to the extent practical, any change in your economic position as a holder of the notes that results solely from the applicable event(s). You will not be entitled to any compensation from the Issuer, the Guarantor (if applicable) or the calculation agent for any loss suffered as a result of any such adjustment or the calculation agent's decision not to make any such adjustment.

If an event requiring anti-dilution adjustments occurs, the calculation agent may make adjustments or a series of adjustments that differ from, or that are in addition to, those described in this product supplement with a view to achieving an equitable result for the holders of the notes. The terms that may be adjusted by the calculation agent include, but are not limited to, the Initial Value, the Final Value and/or the Strike Value of any Underlying Stock, as well as any other value used in the determination of any payments on the notes, and the value and type of property or properties that may be required to be delivered at maturity. In determining whether or not any adjustment achieves an equitable result, the calculation agent may consider any adjustment made by the Options Clearing Corporation or any other equity derivatives clearing organization on options contracts on the affected Underlying Stock or any successor equity.

Unless otherwise specified below, no adjustments to the Stock Adjustment Factor for an Underlying Stock will be required unless the Stock Adjustment Factor adjustment would require a change of at least 0.1% in the then-applicable Stock Adjustment Factor. The applicable Stock Adjustment Factor resulting from any of the adjustments specified in this section will be rounded to the nearest ten-thousandth with five one hundred-thousandths being rounded upward. The calculation agent will not be required to make any adjustments to the Stock Adjustment Factor for an Underlying Stock after the close of business on the business day immediately preceding the maturity date.

If an Underlying Stock is an ADS, the term "**dividend**" used in this section, with respect to that Underlying Stock, will mean, unless otherwise specified in the relevant terms supplement, the dividend paid by the issuer of the applicable Underlying ADS Stock, net of any applicable foreign withholding or similar taxes that would be due on dividends paid to a U.S. person that claims and is entitled to a reduction in those taxes under an applicable income tax treaty, if available.

For purposes of the anti-dilution adjustments, if an ADS is serving as an Underlying Stock, the calculation agent will consider the effect of the relevant event on the holders of the ADSs. For example, if a holder of the ADSs receives an extraordinary dividend, the provisions below would apply to the ADSs. On the other hand, if a spin-off occurs, and the ADSs represents both the spun-off security as well as the existing non-U.S. stock, the calculation agent may determine not to effect anti-dilution adjustments. In particular, if an ADS is serving as an Underlying Stock, no adjustment to the applicable Stock Adjustment Factor, including those described below, will be made (1) if holders of those ADSs are not eligible to participate in any of the transactions described below or (2) to the extent that the calculation agent determines in its sole discretion that the issuer or the depositary for those ADSs has adjusted the number of shares of the applicable Underlying ADS Stock represented by each ADS so that the price of that ADS would not be affected by the corporate action in question. However, to the extent that the number of shares of the applicable Underlying ADS Stock represented by each ADS is changed for any other reason, appropriate adjustments to the anti-dilution adjustments described in this product supplement (which may include ignoring such provision, if appropriate) will be made to reflect that change.

The calculation agent will make all determinations with respect to anti-dilution adjustments affecting any Underlying Stock, including any determination as to whether an event requiring adjustments has occurred (including whether an event has a dilutive or concentrative effect on the theoretical value of any Underlying Stock), as to the nature of the adjustments required and how they will be made or as to the value of any property distributed in a Reorganization Event, and will do so in its sole discretion. In the absence of manifest error, those determinations will be conclusive for all purposes and will be binding on you, the Issuer and the Guarantor (if applicable), without any liability on the part of the calculation agent. You will not be entitled to any compensation from the Issuer, the Guarantor (if applicable) or the calculation agent for any loss suffered as a result of any such determination. Upon your written request, the calculation agent will provide you with information about any adjustments it makes as the calculation agent determines is appropriate.

The following events are those that may require anti-dilution adjustments with respect to an Underlying Stock:

- a subdivision, consolidation or reclassification of that Underlying Stock or a free distribution or dividend of shares of that Underlying Stock to existing holders of that Underlying Stock by way of a bonus, capitalization or similar issue;
- a distribution or dividend to existing holders of that Underlying Stock of:
    - additional shares of that Underlying Stock as described under "— Stock Dividends" below,
    - other share capital or securities granting the right to payment of dividends and/or proceeds of liquidation of that Underlying Stock issuer equally or proportionately with those payments to holders of that Underlying Stock, or
    - any other type of securities, rights or warrants in any case for payment (in cash or otherwise) at less than the prevailing closing price as determined by the calculation agent;
- the declaration by that Underlying Stock issuer of an extraordinary or special dividend or other distribution, whether in cash or additional shares of that Underlying Stock or other assets;
- a repurchase by that Underlying Stock issuer of its equity, whether out of profits or capital and whether the consideration for that repurchase is cash, securities or otherwise;
- a consolidation of that Underlying Stock issuer with another company or merger of that Underlying Stock issuer with another company; and

- any other similar event that may have a dilutive or concentrative effect on the theoretical value of that Underlying Stock.

Stock Splits and Reverse Stock Splits

A stock split is an increase in the number of a corporation's outstanding shares of stock without any change in its stockholders' equity. Each outstanding share is worth less as a result of a stock split. A reverse stock split is a decrease in the number of a corporation's outstanding shares of stock without any change in its stockholders' equity. Each outstanding share is worth more as a result of a reverse stock split.

If an Underlying Stock is subject to a stock split or a reverse stock split, then the applicable Stock Adjustment Factor will be adjusted by multiplying the prior Stock Adjustment Factor by the number of shares that a holder of one share of that Underlying Stock before the applicable effective date would have owned immediately following the applicable effective date.

Stock Dividends

In a stock dividend, a corporation issues additional shares of its stock to all holders of its outstanding stock in proportion to the shares they own. Each outstanding share is worth less as a result of a stock dividend.

If an Underlying Stock is subject to a stock dividend payable in shares of that Underlying Stock, then the applicable Stock Adjustment Factor will be adjusted by multiplying the prior Stock Adjustment Factor by the sum of one and the number of additional shares issued in the stock dividend with respect to one share of that Underlying Stock.

It is not expected that anti-dilution adjustments will be made to the Stock Adjustment Factor of an Underlying Stock in the case of stock dividends payable in shares of that Underlying Stock that are in lieu of ordinary cash dividends payable with respect to shares of that Underlying Stock.

Other Dividends or Distributions

The Stock Adjustment Factor for an Underlying Stock will not be required to be adjusted to reflect dividends or other distributions paid with respect to an Underlying Stock, other than:

- stock dividends described under "— Stock Dividends" above;
- issuances of transferable rights and warrants with respect to that Underlying Stock as described under "— Transferable Rights and Warrants" below;
- distributions that are spin-off events described under "— Reorganization Events" below; and
- extraordinary dividends described below.

An extraordinary dividend means, with respect to a dividend or other distribution with respect to an Underlying Stock, a dividend or other distribution that the calculation agent determines, in its sole discretion, is (1) by its terms or declared intent, declared and paid outside the normal dividend policy or historical dividend practice of the issuer of that Underlying Stock or (2) a payment by the issuer of that Underlying Stock that such issuer announces will be an extraordinary dividend.

If an extraordinary dividend, as described above, occurs with respect to an Underlying Stock, then the applicable Stock Adjustment Factor will be adjusted by dividing the prior Stock Adjustment Factor by, a fraction, the numerator of which is the amount by which the closing price of that Underlying Stock on the trading day before the ex-dividend date exceeds the extraordinary dividend amount and the denominator of which is the closing price of that Underlying Stock on the trading day before the ex-dividend date. The “**ex-dividend date**” for any dividend or other distribution is the first day on which the applicable Underlying Stock trades without the right to receive that dividend or distribution.

The extraordinary dividend amount with respect to an extraordinary dividend for an Underlying Stock equals:

- for an extraordinary dividend that is paid in lieu of a regular quarterly dividend, the amount of the extraordinary dividend per share of that Underlying Stock *minus* an amount per share of that Underlying Stock, as determined by the calculation agent, that is consistent with the normal dividend policy or historical dividend practice of the issuer of that Underlying Stock; or

- for an extraordinary dividend that is not paid in lieu of a regular quarterly dividend, the amount per share of the extraordinary dividend.

To the extent an extraordinary dividend is not paid in cash, the value of the non-cash component will be determined by the calculation agent in its sole discretion. A distribution payable to the holders of an Underlying Stock that is both an extraordinary dividend and payable in shares of that Underlying Stock, or an issuance of rights or warrants with respect to that Underlying Stock that is also an extraordinary dividend, will result in adjustments to the applicable Stock Adjustment Factor, as described under “— Stock Dividends” above or “— Transferable Rights and Warrants” below, as the case may be, and not as described here.

Transferable Rights and Warrants

If the issuer of an Underlying Stock issues transferable rights or warrants to all holders of that Underlying Stock to subscribe for or purchase shares of that Underlying Stock at an exercise price per share that is less than the closing price of that Underlying Stock on the trading day before the ex-dividend date for that issuance, then the applicable Stock Adjustment Factor will be adjusted by multiplying the prior Stock Adjustment Factor by the ratio of:

- the number of shares of that Underlying Stock outstanding at the close of business on the trading day before that ex-dividend date plus the number of additional shares of that Underlying Stock offered for subscription or purchase under those transferable rights or warrants, to

- the number of shares of that Underlying Stock outstanding at the close of business on the trading day before that ex-dividend date plus the product of (1) the total number of additional shares of that Underlying Stock offered for subscription or purchase under the transferable rights or warrants and (2) the exercise price of those transferable rights or warrants *divided* by the closing price on the trading day before that ex-dividend date.

Reorganization Events

Each of the following may be determined by the calculation agent to be a “**Reorganization Event**”:

(a) an Underlying Stock is reclassified or changed, including, without limitation, as a result of the issuance of tracking stock by an Underlying Stock issuer;

(b) the issuer of an Underlying Stock or any surviving entity or subsequent surviving entity of that issuer (a “**Successor Entity**”) has been subject to a merger, consolidation or other combination and either is not the surviving entity or is the surviving entity but all outstanding shares of that Underlying Stock is exchanged for or converted into other property;

(c) any statutory share exchange involving outstanding shares of an Underlying Stock issuer or any Successor Entity and the securities of another entity occurs, other than as part of an event described in clause (b) above;

(d) the issuer of an Underlying Stock or any Successor Entity sells or otherwise transfers its property and assets as an entirety or substantially as an entirety to another entity;

(e) the issuer of an Underlying Stock or any Successor Entity effects a spin-off; that is, the issuer issues equity securities of another issuer to all holders of that Underlying Stock, other than as part of an event described in clauses (b), (c) or (d) above (a "**Spin-Off Event**");

(f) the issuer of an Underlying Stock or any Successor Entity is liquidated, dissolved or wound up or is subject to a proceeding under any applicable bankruptcy, insolvency or other similar law; or

(g) a tender or exchange offer or going-private transaction is commenced for all the outstanding shares of the issuer of an Underlying Stock or any Successor Entity and is consummated and completed in full for all or substantially all of such shares.

If the calculation agent determines in its sole discretion that a Reorganization Event has occurred with respect to an Underlying Stock, then the closing price and, if applicable, the trading price of one share of that Underlying Stock from and including the effective date for that Reorganization Event will be adjusted as set forth below.

If a reorganization event other than those described above occurs with respect to an Underlying Stock, the calculation agent may calculate the corresponding adjustment or series of adjustments to the closing price and, if applicable, the trading price of one share of that Underlying Stock as the calculation agent determines in good faith to be appropriate to account for that reorganization event. In addition, see "Anti-Dilution Adjustments" above for additional information about multiple adjustments on the same day. You will not be entitled to any compensation from the Issuer, the Guarantor (if applicable) or the calculation agent for any loss suffered as a result of any such adjustment or the calculation agent's decision not to make any such adjustment.

If an ADS is serving as an Underlying Stock, the determination as to whether a Reorganization Event has occurred with respect to that Underlying Stock will be made as if the applicable Underlying ADS Stock were serving as that Underlying Stock. In addition, if an ADS is serving as an Underlying Stock, no adjustments will be made in response to the Reorganization Event (1) if holders of those ADSs are not eligible to participate in the Reorganization Event or (2) to the extent that the calculation agent determines in its sole discretion that the issuer or the depositary for those ADSs has adjusted the assets represented by each ADS so that the price of that ADS would not be affected by the Reorganization Event in question.

If a Reorganization Event with respect to an Underlying Stock occurs, the calculation agent will be solely responsible for the determination of any Exchange Property, the value of any Exchange Property and the effect of the Reorganization Event on the closing price and, if applicable, the trading price of one share of that Underlying Stock, and its determinations and calculations will be conclusive absent manifest error.

The calculation agent will provide information as to any adjustments resulting from a Reorganization Event upon written request by any holder of the notes.

The Exchange Property

The "**Exchange Property**" with respect to an Underlying Stock that is subject to a Reorganization Event will consist of any shares of that Underlying Stock that continue to be held by the holders of that Underlying Stock and any securities, cash or any other assets distributed to the holders of that Underlying Stock with respect to one share of that Underlying Stock in, or as a result of, that Reorganization Event. No interest will accrue on any Exchange Property.

In the case of a consummated and completed-in-full tender or exchange offer or going-private transaction involving Exchange Property of a particular type, the Exchange Property will be deemed to include the amount of cash or other property paid by the offeror in the tender or exchange offer with respect to the Exchange Property (in an amount determined on the basis of the rate of exchange in that tender or exchange offer or going-private transaction). In the event of a tender or exchange offer, a merger, combination or consolidation or a going-private transaction with respect to Exchange Property in which an offeree may elect to receive cash or other property, the Exchange Property will be deemed to include the kind and amount of cash and other property received by offerees who do not make an election.

With respect to any portion of the Exchange Property that consists of property other than Exchange Property Securities or cash (such property, "**Liquidation Property**"), that portion of the Exchange Property will be deemed instead to consist of an amount of cash equal to the market value of the Liquidation Property, as determined by the calculation agent in its sole discretion in any manner it determines.

"**Exchange Property Securities**" means any securities (including securities issued by a non-U.S. company and quoted and traded in a foreign currency).

The Closing Price and the Trading Price of the Exchange Property

On any relevant day, the "**closing price**" or the "**trading price**" of the Exchange Property means the product of:

(a) the sum of:

   (i) the closing price or trading price, respectively, of one share of any Exchange Property Securities composing the Exchange Property (in the case of securities issued by a non-U.S. company and quoted and traded in a foreign currency, converted into U.S. dollars using the applicable exchange rate as described in the section entitled "— Delisting of ADSs or Termination of ADS Facility") on that day *multiplied* by the quantity of the applicable Exchange Property Securities received for each share of the applicable Underlying Stock; and

   (ii) the aggregate cash amount of any Exchange Property (other than Exchange Property Securities), including the aggregate cash amount resulting from the valuation of the Liquidation Property as described above; and

(b) the Stock Adjustment Factor for the applicable Underlying Stock as of the effective date for the Reorganization Event.

Any Exchange Property Securities composing the Exchange Property will be subject to the anti-dilution adjustment and reorganization-event adjustments including but not limited to those set forth in this product supplement as if it were an Underlying Stock, and the Stock Adjustment Factor of any Exchange Property Securities will be set equal to 1.0 on the effective date for the Reorganization Event.

Adjustment to the Closing Price and the Trading Price of One Share of the Applicable Underlying Stock

If a Reorganization Event with respect to an Underlying Stock occurs, then, for purposes of any determination with respect to that Underlying Stock on or after the effective date of that Reorganization Event:

(a) the closing price of one share of that Underlying Stock on any relevant day will equal the closing price of the Exchange Property on that day; and

(b) the trading price of one share of that Underlying Stock at any time on any relevant day will equal the trading price of the Exchange Property at that time on that day.

Adjustment to the Payment at Maturity

For Physically Settled Notes, if a Reorganization Event occurs and, at maturity, you would have received the Physical Delivery Amount (or the cash value thereof), then for each note, instead of receiving the number of shares of the applicable Underlying Stock equal to the Physical Delivery Amount (or the cash value thereof), you will receive at maturity, for each share of that Underlying Stock included in the Physical Delivery Amount as of the effective date for the Reorganization Event, the Exchange Property with respect to one share of that Underlying Stock (or the cash value thereof). Fractional shares, as well as shares of securities issued by a non-U.S. company, will be payable in cash.

Delisting of an Underlying Stock or Nationalization of an Underlying Stock Issuer

If a non-U.S. equity security serving as an Underlying Stock with a relevant exchange located outside the United States (an "**Original Foreign Underlying Stock**") is no longer listed or admitted to trading on a securities exchange (a "**Delisting Event**") or if the issuer of an Original Foreign Underlying Stock is nationalized (a "**Nationalization Event**"), the calculation agent, in its sole discretion without consideration for the interests of investors, will either:

(a) select a Successor Foreign Underlying Stock (as defined below) to that non-U.S. equity security after the close of the principal trading session on the trading day immediately prior to the effective date of the Delisting Event or Nationalization Event, as applicable (the effective date of the Delisting Event or Nationalization Event, as applicable, the "**Change Date**"), in accordance with the following paragraphs (each successor stock as so selected, a "**Successor Foreign Underlying Stock**" and each issuer of that Successor Foreign Underlying Stock, a "**Successor Foreign Underlying Stock Issuer**"); or

(b) on and after the Change Date, (i) deem the closing price and, if applicable, the trading price of that Original Foreign Underlying Stock on each day to be the closing price of that Original Foreign Underlying Stock on the trading day immediately prior to the Change Date and (ii) deem the Stock Adjustment Factor of that Original Foreign Underlying Stock on each day to be the Stock Adjustment Factor of that Original Foreign Underlying Stock on the trading day immediately prior to the Change Date.

Upon the selection of any Successor Foreign Underlying Stock by the calculation agent pursuant to clause (a) of the immediately preceding paragraph, on and after the Change Date:

(a) references in this product supplement or the relevant terms supplement to the applicable "Underlying Stock" will no longer refer to the Original Foreign Underlying Stock and will be deemed instead to refer to that Successor Foreign Underlying Stock for all purposes;

(b) references in this product supplement or the relevant terms supplement to "issuer" of the Original Foreign Underlying Stock will be deemed to be to the applicable Successor Foreign Underlying Stock Issuer for all purposes;

(c) the Initial Value (or Strike Value, if applicable) for that Successor Foreign Underlying Stock will be equal to the Initial Value (or Strike Value, if applicable) of the Original Foreign Underlying Stock as of the trading day immediately preceding the Change Date; and

(d) the Stock Adjustment Factor for that Successor Foreign Underlying Stock will be an amount as determined by the calculation agent in good faith as of the Change Date, taking into account, among other things, the closing price of the Original Foreign Underlying Stock on the trading day immediately preceding the Change Date, subject to adjustment for certain corporate events related to that Successor Foreign Underlying Stock in accordance with "— Anti-Dilution Adjustments."

The "**Successor Foreign Underlying Stock**" with respect to the Underlying Stock will be the common stock of a company organized in, or with its principal executive office located in, the country in which the issuer of the Original Foreign Underlying Stock is organized or has its principal executive office, selected by the calculation agent from among the common stocks of three companies then listed on a securities exchange that are not the Underlying Stock, with the three largest market capitalizations within the same industry as the issuer of the Original Foreign Underlying Stock that also have an equity security that is listed and traded on a national securities exchange in the United States or the primary non-U.S. securities exchange or market for the original Underlying Stock that, in the sole discretion of the calculation agent, is the most comparable to the Original Foreign Underlying Stock (prior to the Change Date), taking into account such factors as the calculation agent deems relevant, including, without limitation, dividend history and stock price volatility; *provided, however*, that a Successor Foreign Underlying Stock will not be any stock that is subject to a trading restriction under the trading restriction policies of the Issuer, the Guarantor (if applicable) or any of their affiliates that would materially limit the ability of the Issuer or any of its affiliates to hedge the notes with respect to that stock.

Following a Delisting Event or Nationalization Event, as applicable, in which a Successor Foreign Underlying Stock is selected, the Stock Adjustment Factor of the Successor Foreign Underlying Stock will be subject to adjustment as described above under "— Anti-Dilution Adjustments."

The calculation agent will provide information as to any Successor Foreign Underlying Stock (including its Initial Value (or Strike Value, if applicable)) upon written request by any holder of the notes.

Delisting of ADSs or Termination of ADS Facility

If an ADS serving as an Underlying Stock (an "**Original Underlying Stock**") is no longer listed or admitted to trading on a U.S. securities exchange registered under the Exchange Act, or included in the OTC Bulletin Board, or if the ADS facility between the issuer of the applicable Underlying ADS Stock and the ADS depositary is terminated for any reason, then on and after the date that ADS is no longer so listed or admitted to trading or the date of that termination, as applicable (the "**ADS Change Date**"), the calculation agent, in its sole discretion without consideration for the interests of investors, will either:

(a) select a Successor Underlying Stock (as defined below) to that ADS after the close of the principal trading session on the trading day immediately prior to the ADS Change Date in accordance with the following paragraphs (each successor stock as so selected, a "**Successor Underlying Stock**" and each successor stock issuer, a "**Successor Underlying Stock Issuer**"); or

(b) select the applicable Underlying ADS Stock to be that Underlying Stock.

Upon the selection of any Successor Underlying Stock by the calculation agent pursuant to clause (a) of the preceding paragraph, on and after the ADS Change Date,

(a) references in this product supplement or the relevant terms supplement to the applicable "Underlying Stock" will no longer refer to the Original Underlying Stock and will be deemed instead to refer to that Successor Underlying Stock for all purposes;

(b) references in this product supplement or the relevant terms supplement to "issuer" of the Original Underlying Stock will be deemed to be to the applicable Successor Underlying Stock Issuer for all purposes;

(c) the Initial Value (or Strike Value, if applicable) for that Successor Underlying Stock will be equal to the Initial Value (or Strike Value, if applicable) of the Original Underlying Stock as of the trading day immediately preceding the ADS Change Date; and

(d) the Stock Adjustment Factor for that Successor Underlying Stock will be an amount as determined by the calculation agent in good faith as of the ADS Change Date, taking into account, among other things, the closing price of the Original Underlying Stock on the trading day immediately preceding the ADS Change Date, subject to adjustment for certain corporate events related to that Successor Underlying Stock in accordance with "— Anti-Dilution Adjustments."

The "**Successor Underlying Stock**" with respect to an ADS will be the ADS of a company organized in, or with its principal executive office located in, the country in which the issuer of the Original Underlying Stock is organized or has its principal executive office, selected by the calculation agent from among the ADSs of three companies then registered to trade on the NYSE or The NASDAQ Stock Market with the same primary Standard Industrial Classification Code ("**SIC Code**") as that Original Underlying Stock that, in the sole discretion of the calculation agent, are the most comparable to that Original Underlying Stock, taking into account such factors as the calculation agent deems relevant, including, without limitation, market capitalization, dividend history and stock price volatility; *provided, however*, that a Successor Underlying Stock will not be any ADS that is (or the Underlying ADS Stock for which is) subject to a trading restriction under the trading restriction policies of the Issuer, the Guarantor (if applicable) or any of their affiliates that would materially limit the ability of the Issuer or any of its affiliates to hedge the notes with respect to the ADS (a "**Hedging Restriction**"); *provided further* that if a Successor Underlying Stock cannot be identified as set forth above for which a Hedging Restriction does not exist, that Successor Underlying Stock will be selected by the calculation agent and will be the ADS of a company that (i) is organized in, or with its principal executive office located in, the country in which the issuer of that Original Underlying Stock is organized or has its principal executive office, (ii) is then registered to trade on the NYSE or The NASDAQ Stock Market, (iii) in the sole discretion of the calculation agent, is the most comparable to that Original Underlying Stock, taking into account such factors as the calculation agent deems relevant, including, without limitation, market capitalization, dividend history and stock price volatility, (iv) is within the same Division and Major Group classification (as defined by the Office of Management and Budget) as the primary SIC Code for that Original Underlying Stock and (v) is not subject to a Hedging Restriction. Notwithstanding the foregoing, if a Successor Underlying Stock cannot be identified in the country in which the issuer of that Original Underlying Stock is organized or has its principal executive office, as set forth above, that Successor Underlying Stock will be selected by the calculation agent and will be a common stock of a company that is then registered to trade on the NYSE or The NASDAQ Stock Market with the same primary SIC Code as that Original Underlying Stock that, in the sole discretion of the calculation agent, is the most comparable to that Original Underlying Stock, taking into account such factors as the calculation agent deems relevant, including, without limitation, market capitalization, dividend history and stock price volatility and that is not subject to a Hedging Restriction.

Following the selection of a Successor Underlying Stock, the Stock Adjustment Factor of the Successor Underlying Stock will be subject to adjustment as described above under "— Anti-Dilution Adjustments."

The calculation agent will provide information as to any Successor Underlying Stock (including its Initial Value (or Strike Value, if applicable)) upon written request by any holder of the notes.

If the calculation agent selects the applicable Underlying ADS Stock to be an Underlying Stock pursuant to clause (b) of the first paragraph under "— Delisting of ADSs or Termination of ADS Facility" above, the Stock Adjustment Factor for that Underlying Stock will thereafter equal the last value of the Stock Adjustment Factor for the ADS multiplied by the number of shares of the applicable Underlying ADS Stock represented by a single ADS, subject to further adjustments as described under "— Anti-Dilution Adjustments." On and after the ADS Change Date, the closing price of the applicable Underlying Stock on any relevant day and, if applicable, the trading price at any time on any relevant day will be expressed in U.S. dollars by converting the closing price into U.S. dollars using the applicable exchange rate as described below.

On any date of determination, the applicable exchange rate will be the spot rate of the local currency of the applicable Underlying ADS Stock relative to the U.S. dollar as reported by Reuters Group PLC ("**Reuters**") on the relevant page for that rate at approximately the closing time of the relevant exchange for the applicable Underlying ADS Stock on that day. However, (1) if that rate is not displayed on the relevant Reuters page on the date of determination, the applicable exchange rate on that day will equal an average (mean) of the bid quotations in the City of New York received by the calculation agent at approximately 11:00 a.m., New York City time, on the business day immediately following the date of determination, from three recognized foreign exchange dealers (*provided* that each dealer commits to execute a contract at its applicable bid quotation) or, (2) if the calculation agent is unable to obtain three bid quotations, the average of the bid quotations obtained from two recognized foreign exchange dealers or, (3) if the calculation agent is able to obtain a bid quotation from only one recognized foreign exchange dealer, that bid quotation, in each case for the purchase of the applicable non-U.S. currency for U.S. dollars in the aggregate principal amount of the notes for settlement on the third business day following the date of determination. If the calculation agent is unable to obtain at least one bid quotation, the calculation agent will determine the applicable exchange rate in its sole discretion.

Indices

If the notes are linked to any Index, a separate underlying supplement or the relevant terms supplement will provide additional information relating to that Index. Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, all information regarding any Index, including, without limitation, its make-up, method of calculation and changes in its components, will be derived from publicly available information, without independent verification.

Level of an Index

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the "**closing level**" of an Index or any relevant successor index (as defined under "— Discontinuation of an Index; Alteration of Method of Calculation" below) on any relevant day will equal the closing level of that Index or successor index, as applicable, as published on the applicable page (or any successor page) of Bloomberg Professional® service ("Bloomberg") or any successor service, for that Index or successor index, as applicable. In certain circumstances, the closing level of an Index or any relevant successor index will be based on the alternative calculation of that Index described under "General Terms of Notes — Postponement of a Determination Date" above or "— Discontinuation of an Index; Alteration of Method of Calculation" below. The relevant terms supplement may refer to the closing level of an Index as the closing value of that Index.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the "**intraday level**" of an Index or any relevant successor index at any time on any relevant day (including at the open and close of trading for that Index or successor index, as applicable) will equal the most recently reported level at that time for that Index or successor index, as applicable, as published on the applicable page (or any successor page) of Bloomberg or any successor service, for that Index or successor index, as applicable. In certain circumstances, the intraday level of an Index or any relevant successor index will be based on the alternative calculation of that Index described under "— Discontinuation of an Index; Alteration of Method of Calculation" below.

The closing level and intraday level of an Index as published by Bloomberg or any successor service may be published to greater or fewer decimal places than the official closing level or intraday level of that Index as published by its sponsor. Accordingly, the closing level and intraday level of an Index as published by Bloomberg may be slightly different from the official closing level or intraday level of that Index as published by its sponsor.

Market Disruption Events for an Equity Index

With respect to an Equity Index (or any relevant successor index), a "**market disruption event**," unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, means:

- the occurrence or existence of a suspension, absence or material limitation of trading of equity securities then constituting 20% or more of the level of that Equity Index (or that successor index) on the relevant exchanges for those securities for more than two hours of trading during, or during the one-hour period preceding the close of, the principal trading session on that relevant exchange;

- a breakdown or failure in the price and trade reporting systems of any relevant exchange as a result of which the reported trading prices for equity securities then constituting 20% or more of the level of that Equity Index (or that successor index) during the one-hour period preceding the close of the principal trading session on that relevant exchange are materially inaccurate;

- the occurrence or existence of a suspension, absence or material limitation of trading on the primary exchange or market for trading in futures or options contracts related to that Equity Index (or that successor index), if available, for more than two hours of trading during, or during the one-hour period preceding the close of, the principal trading session on that exchange or market; or

- a decision to permanently discontinue trading in those related futures or options contracts,

in each case, as determined by the calculation agent in its sole discretion; and

- a determination by the calculation agent in its sole discretion that the applicable event described above materially interfered with the Issuer's ability or the ability of any of its affiliates to adjust or unwind all or a material portion of any hedge with respect to the notes.

For purposes of determining whether a market disruption event with respect to an Equity Index (or any relevant successor index) exists at any time, if trading in a security included in that Equity Index (or that successor index) is materially suspended or materially limited at that time, then the relevant percentage contribution of that security to the level of that Equity Index (or that successor index) will be based on a comparison of:

- the portion of the level of that Equity Index (or that successor index) attributable to that security relative to

- the overall level of that Equity Index (or that successor index),

in each case immediately before that suspension or limitation.

For purposes of determining whether a market disruption event with respect to an Equity Index (or any relevant successor index) has occurred, unless otherwise specified in the relevant terms supplement:

- a limitation on the hours or number of days of trading will not constitute a market disruption event if it results from an announced change in the regular business hours of the relevant exchange or the primary exchange or market for trading in futures or options contracts related to that Equity Index (or that successor index);

- limitations pursuant to the rules of any relevant exchange similar to NYSE Rule 80B (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to NYSE Rule 80B as determined by the calculation agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading;

- a suspension of trading in futures or options contracts on that Equity Index (or that successor index) by the primary exchange or market for trading in those contracts, if available, by reason of:

  - a price change exceeding limits set by that exchange or market,

- an imbalance of orders relating to those contracts or

- a disparity in bid and ask quotes relating to those contracts

will, in each case, constitute a suspension, absence or material limitation of trading in futures or options contracts related to that Equity Index (or that successor index); and

- a "suspension, absence or material limitation of trading" on any relevant exchange or on the primary exchange or market on which futures or options contracts related to that Equity Index (or that successor index) are traded will not include any time when that exchange or market is itself closed for trading under ordinary circumstances.

Market Disruption Events for a Bond Index

With respect to a Bond Index (or any relevant successor index), a "**market disruption event**," unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, means:

- the occurrence or existence of a suspension, absence or material limitation of trading of securities then constituting 10% or more of the level of that Bond Index (or that successor index) in the market generally for those securities during the principal trading hours of those securities;

- a breakdown or failure in the price and trade reporting systems of the relevant market that results in a failure to determine the price of the securities then constituting 10% or more of the level of that Bond Index (or that successor index) during the principal trading hours of those securities; or

- the closure (including the early closure) of the relevant market in securities then constituting 10% or more of the level of that Bond Index (or that successor index),

in each case, as determined by the calculation agent in its sole discretion; and

- a determination by the calculation agent in its sole discretion that the applicable event described above materially interfered with the Issuer's ability or the ability of any of its affiliates to adjust or unwind all or a material portion of any hedge with respect to the notes.

For purposes of determining whether a market disruption event with respect to a Bond Index (or any relevant successor index) exists at any time, if trading in a security included in that Bond Index (or that successor index) is suspended or materially limited at that time, then the relevant percentage contribution of that security to the level of that Bond Index (or that successor index) will be based on a comparison of:

- the portion of the level of that Bond Index (or that successor index) attributable to that security relative to

- the overall level of that Bond Index (or that successor index),

in each case immediately before that suspension or limitation.

Market Disruption Events for a Commodity Index

With respect to a Commodity Index (or any relevant successor index), a "**market disruption event**," unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, means:

- any suspension of or limitation imposed on trading in any Relevant Index Contract on the relevant exchange or any other event that disrupts or impairs the ability of market participants in general to affect transactions in, or obtain market values for, any Relevant Index Contract on the relevant exchange, in each case which the calculation agent determines is material;

- all trading in any Relevant Index Contract is suspended for the entire day;
- all trading in any Relevant Index Contract is suspended (which term, for the avoidance of doubt, will not include, for purposes of this bullet point, a Relevant Index Contract being bid or offered at the limit price) subsequent to the opening of trading on that day, and trading does not recommence at least ten minutes prior to the actual closing time of the regular trading session of that Relevant Index Contract on that day; or
- if the relevant exchange establishes limits on the range within which the price of any Relevant Index Contract may fluctuate, the official settlement price of any Relevant Index Contract is at the upper or lower limit of that range on that day,

in each case as determined by the calculation agent in its sole discretion; and

- a determination by the calculation agent in its sole discretion that the applicable event described above materially interfered with the Issuer's ability or the ability of any of its affiliates to adjust or unwind all or a material portion of any hedge with respect to the notes.

Discontinuation of an Index; Alteration of Method of Calculation

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, if the sponsor of an Index (an "**Index Sponsor**") discontinues publication of that Index and that Index Sponsor or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Index (such index being referred to in this product supplement as a "**successor index**"), then from and including an effective date determined by the calculation agent in good faith (with respect to that Index, the "**Successor Date**"):

- the closing level of that Index on any Determination Date, or any other relevant date on which the closing level of that Index is to be determined, will be determined by reference to the level of that successor index published with respect to that day and an adjustment factor determined by the calculation agent in good faith as of the applicable Successor Date, taking into account the closing level of that Index on the trading day immediately preceding the applicable Successor Date; and
- the intraday level, if applicable, of that Index at any time on any Determination Date, or any other relevant date on which the intraday level of that Index is to be determined, will be determined by reference to the level of that successor index as most recently reported by Bloomberg at that time and the adjustment factor.

Upon any selection by the calculation agent of a successor index, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, the Issuer, the Guarantor (if applicable) and DTC, as holder of the notes.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, if the Index Sponsor for an Index discontinues publication of that Index prior to, and that discontinuation is continuing on, a Determination Date or any other relevant date on which the closing level of that Index is to be determined, and the calculation agent determines, in its sole discretion, that no successor index for that Index is available at that time, or the calculation agent has previously selected a successor index for that Index and publication of that successor index is discontinued prior to, and that discontinuation is continuing on, that Determination Date or other relevant date, then (a) the calculation agent will determine the closing level of that Index for that Determination Date or that other relevant date on that date and (b) the intraday level of that Index, if applicable, at any time on any relevant day will be deemed to equal the closing level of that Index on that day, as determined by the calculation agent. Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the closing level of that Index will be computed by the calculation agent:

- with respect to an Equity Index, in accordance with the formula for and method of calculating that Index or successor index, as applicable, last in effect prior to that discontinuation using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, the calculation agent's good faith estimate of the closing price that would have prevailed but for that suspension or limitation) at the close of the principal trading session on that date of each security most recently composing that Index or successor index, as applicable;
- with respect to a Bond Index, in good faith and in a commercially reasonable manner; or
- with respect to a Commodity Index, in accordance with the formula for and method of calculating that Index or successor index, as applicable, last in effect prior to that discontinuation using the official settlement price(s) (or, if trading in the relevant futures contract(s) has been materially suspended or materially limited, the calculation agent's good faith estimate of the applicable settlement price(s) that would have prevailed but for that suspension or limitation) at the close of the principal trading session on that date of each futures contract most recently composing that Index or successor index, as applicable, as well as any futures contract required to roll any expiring futures contract in accordance with the method of calculating that Index or successor index, as applicable.

Notwithstanding these alternative arrangements, discontinuation of the publication of an Index or its successor index, as applicable, may adversely affect the value of the notes.

If at any time the method of calculating an Index or a successor index, or the level thereof, is changed in a material respect, or if an Index or a successor index is in any other way modified so that it does not, in the opinion of the calculation agent, fairly represent the level of that Index or successor index, as applicable, had those changes or modifications not been made, then the calculation agent will, at the close of business in the City of New York on each date on which the closing level or intraday level, if applicable, of that Index or successor index, as applicable, is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of an index comparable to that Index or successor index, as the case may be, as if those changes or modifications had not been made, and the calculation agent will calculate the closing level or intraday level, as applicable, of that Index or successor index, as applicable, with reference to that Index or successor index, as adjusted. Accordingly, if the method of calculating an Index or a successor index is modified so that the level of that Index or successor index is a fraction of what it would have been if there had been no such modification (*e.g.*, due to a split in that Index or successor index), then the calculation agent will adjust its calculation of that Index or successor index, as applicable, in order to arrive at a level of that Index or successor index, as applicable, as if there had been no modification (*e.g.*, as if the split had not occurred).

Funds

If the notes are linked to any Fund, a separate underlying supplement or the relevant terms supplement will provide additional information relating to that Fund.

Registered investment companies are required to file periodically certain financial and other information specified by the SEC. Information provided to or filed with the SEC can be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, NE, Washington, DC 20549, and copies of those materials can be obtained from the Public Reference Section of the SEC, 100 F Street, NE, Washington, DC 20549, at prescribed rates. In addition, information provided to or filed with the SEC electronically can be accessed through a website maintained by the SEC. The address of the SEC's website is http://www.sec.gov. Information regarding any Fund may also be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents.

This product supplement and the relevant terms supplement relate only to the notes offered thereby and do not relate to any Fund. All disclosures contained in the relevant terms supplement

regarding any Fund will be derived from publicly available documents and other publicly available information, without independent verification. The Issuer and the Guarantor (if applicable) have not participated, and will not participate, in the preparation of those documents, and the Issuer and the Guarantor (if applicable) have not made, and will not make, any due diligence inquiry with respect to any Fund in connection with the offering of the notes. The Issuer and the Guarantor (if applicable) do not make any representation that those publicly available documents or any other publicly available information regarding any Fund is accurate or complete, and the Issuer and the Guarantor (if applicable) are not responsible for public disclosure of information by any Fund, whether contained in filings with the SEC or otherwise. The Issuer and the Guarantor (if applicable) also cannot give any assurance that all events occurring prior to the date of the relevant terms supplement (including events that would affect the accuracy or completeness of the publicly available documents of any Fund) that would affect the value of any Fund will have been publicly disclosed. Subsequent disclosure of any of these events or the disclosure of, or failure to disclose, material future events concerning any Fund could affect the market value of the notes or any payment on the notes. Any prospective purchaser of the notes should undertake an independent investigation of any Fund as in its judgment is appropriate to make an informed decision with respect to an investment in the notes.

Price of One Share of a Fund

Unless otherwise specified in the relevant terms supplement, the "**closing price**" of one share of the Fund or any relevant successor fund (as defined under "— Discontinuation of a Fund; Alternate Calculation of Closing Price and Trading Price") on any relevant day means:

- if that Fund (or that successor fund) is listed or admitted to trading on a national securities exchange, the last reported sale price, regular way (or, in the case of The NASDAQ Stock Market, the official closing price) of the principal trading session on that day on the principal U.S. securities exchange registered under the Exchange Act, on which that Fund (or that successor fund) is listed or admitted to trading;

- if that Fund (or that successor fund) is not listed or admitted to trading on any national securities exchange but is included in the OTC Bulletin Board, the last reported sale price of the principal trading session on the OTC Bulletin Board on that day; or

- if, because of a market disruption event or otherwise, the last reported sale price or official closing price, as applicable, for that Fund (or that successor fund) is not available pursuant to the preceding bullet points, the mean, as determined by the calculation agent, of the bid prices for the shares of that Fund (or that successor fund) obtained from as many recognized dealers in that Fund (or that successor fund), but not exceeding three, as will make those bid prices available to the calculation agent. Bids of any of the Issuer's or the Guarantor's (if applicable) affiliates may be included in the calculation of the mean, but only to the extent that any of those bids is not the highest or the lowest of the bids obtained,

in each case *multiplied* by the then-current Share Adjustment Factor, subject to the provisions of "General Terms of Notes — Postponement of a Determination Date" above and "— Discontinuation of a Fund; Alternate Calculation of Closing Price and Trading Price" below. The relevant terms supplement may refer to the closing price of one share of a Fund as the closing value of that Fund.

Unless otherwise specified in the relevant terms supplement, the "**trading price**" of one share of a Fund or any relevant successor fund at any time on any relevant day means:

- if that Fund (or that successor fund) is listed or admitted to trading on a national securities exchange, the most recently reported sale price, regular way, at that time during the principal trading session on that day on the principal U.S. securities exchange registered under the Exchange Act, on which that Fund (or that successor fund) is listed or admitted to trading; or

- if that Fund (or that successor fund) is not listed or admitted to trading on any national securities exchange but is included in the OTC Bulletin Board, the most recently reported sale price at that time during the principal trading session on the OTC Bulletin Board on that day,

in each case *multiplied* by the then-current Share Adjustment Factor, subject to the provisions of " — Discontinuation of a Fund; Alternate Calculation of Closing Price and Trading Price" below.

Unless otherwise specified in the relevant terms supplement, with respect to a Fund, the "**Share Adjustment Factor**" will be set initially at 1.0, subject to adjustment upon the occurrence of certain events affecting that Fund. See "— Anti-Dilution Adjustments" below.

Market Disruption Events for a Fund

With respect to a Fund (or any relevant successor fund), a "**market disruption event**," unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, means:

- the occurrence or existence of a suspension, absence or material limitation of trading of the shares of that Fund (or that successor fund) on the relevant exchange for the shares of that Fund (or that successor fund) for more than two hours of trading during, or during the one-half hour period preceding the close of, the principal trading session on that relevant exchange;

- a breakdown or failure in the price and trade reporting systems of the relevant exchange for the shares of that Fund (or that successor fund) as a result of which the reported trading prices for the shares of that Fund (or that successor fund) during the last one-half hour preceding the close of the principal trading session on that relevant exchange are materially inaccurate;

- if applicable, the occurrence or existence of a suspension, absence or material limitation of trading of securities, commodities, futures contracts or other assets or market measures then constituting 20% or more of the level of the applicable Underlying Index on the relevant exchanges for those securities, commodities, futures contracts or other assets or market measures for more than two hours of trading during, or during the one-half hour period preceding the close of, the principal trading session on that relevant exchange; or

- the occurrence or existence of a suspension, absence or material limitation of trading on the primary exchange or market for trading in futures or options contracts related to the applicable Underlying Index, if any, or shares of that Fund (or that successor fund), if available, for more than two hours of trading during, or during the one-half hour period preceding the close of, the principal trading session on that exchange or market,

in each case, as determined by the calculation agent in its sole discretion; and

- a determination by the calculation agent in its sole discretion that the applicable event described above materially interfered with the Issuer's ability or the ability of any of its affiliates to adjust or unwind all or a material portion of any hedge with respect to the notes.

For purposes of determining whether a market disruption event with respect to a Fund (or any relevant successor fund) exists at any time, if trading in a security, commodity, futures contract or other asset or market measure included in the applicable Underlying Index, if any, is materially suspended or materially limited at that time, then the relevant percentage contribution of that security, commodity, futures contract or other asset or market measure to the level of the applicable Underlying Index, if any, will be based on a comparison of:

- the portion of the level of the applicable Underlying Index, if any, attributable to that security, commodity, futures contract or other asset or market measure relative to

- the overall level of the applicable Underlying Index, if any, in each case immediately before that suspension or limitation.

For purposes of determining whether a market disruption event with respect to a Fund (or any relevant successor fund) has occurred, unless otherwise specified in the relevant terms supplement:

- a limitation on the hours or number of days of trading will not constitute a market disruption event if it results from an announced change in the regular business hours of the relevant exchange or the primary exchange or market for trading in futures or options contracts related to the shares of that Fund (or that successor fund);
- a decision to permanently discontinue trading in the relevant futures or options contract or exchange-traded fund will not constitute a market disruption event;
- limitations pursuant to the rules of any relevant exchange similar to NYSE Rule 80B (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to NYSE Rule 80B as determined by the calculation agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading;
- a suspension of trading in futures or options contracts on the applicable Underlying Index, if any, or shares of that Fund (or that successor fund) by the primary exchange or market for trading in those contracts, if available, by reason of:
  - a price change exceeding limits set by that exchange or market,
  - an imbalance of orders relating to those contracts or
  - a disparity in bid and ask quotes relating to those contracts

  will, in each case, constitute a suspension, absence or material limitation of trading in futures or options contracts related to the applicable Underlying Index, if any, or the shares of that Fund (or that successor fund); and
- a "suspension, absence or material limitation of trading" on any relevant exchange or on the primary exchange or market on which futures or options contracts related to the applicable Underlying Index, if any, or the shares of that Fund (or that successor fund) are traded will not include any time when that exchange or market is itself closed for trading under ordinary circumstances.

Anti-Dilution Adjustments

The Share Adjustment Factor for a Fund (or any relevant successor fund) is subject to adjustment by the calculation agent as a result of the anti-dilution adjustments described in this section.

Unless otherwise specified below, no adjustments to the Share Adjustment Factor for a Fund (or any relevant successor fund) will be required unless the Share Adjustment Factor adjustment would require a change of at least 0.1% in the applicable Share Adjustment Factor then in effect. The applicable Share Adjustment Factor resulting from any of the adjustments specified in this section will be rounded to the nearest ten-thousandth with five one hundred-thousandths being rounded upward. The calculation agent will not be required to make any adjustments to the Share Adjustment Factor for a Fund (or any relevant successor fund) after the close of business on the business day immediately preceding the maturity date.

No adjustments to the Share Adjustment Factor for a Fund (or any relevant successor fund) will be required other than those specified below. The required adjustments specified in this section do not cover all events that could affect the closing price of one share of a Fund (or any relevant successor fund) on any relevant day during the term of the notes.

The calculation agent will be solely responsible for the determination and calculation of any adjustments to the Share Adjustment Factor for a Fund (or any relevant successor fund) and of any related determinations and calculations, and its determinations and calculations with respect thereto will be conclusive in the absence of manifest error.

The calculation agent will provide information as to any adjustments to the Share Adjustment Factor for a Fund (or any relevant successor fund) upon written request by any holder of the notes.

Share Splits and Reverse Share Splits

If the shares of a Fund (or any relevant successor fund) are subject to a share split or reverse share split, then once that split has become effective, the applicable Share Adjustment Factor will be adjusted so that the new Share Adjustment Factor will equal the product of:

- the prior Share Adjustment Factor, and
- the number of shares that a holder of one share of that Fund (or that successor fund) before the effective date of the share split or reverse share split would have owned immediately following the applicable effective date.

Share Dividends or Distributions

If a Fund (or any relevant successor fund) is subject to (i) a share dividend, *i.e.*, an issuance of additional shares of that Fund (or that successor fund) that is given ratably to all or substantially all holders of shares of that Fund (or that successor fund) or (ii) a distribution of shares of that Fund (or that successor fund) as a result of the triggering of any provision of the corporate charter of that Fund (or that successor fund), then, once the dividend or distribution has become effective and the shares of that Fund (or that successor fund) are trading ex-dividend, the applicable Share Adjustment Factor will be adjusted so that the new Share Adjustment Factor will equal the prior Share Adjustment Factor *plus* the product of:

- the prior Share Adjustment Factor, and
- the number of additional shares issued in the share dividend or distribution with respect to one share of that Fund (or that successor fund).

Non-Cash Dividends or Distributions

If a Fund (or any relevant successor fund) distributes shares of capital stock, evidences of indebtedness or other assets or property of that Fund (or that successor fund) to all or substantially all holders of shares of that Fund (or that successor fund) (other than (i) share dividends or distributions referred to under "— Share Splits and Reverse Share Splits" or "— Share Dividends or Distributions" above and (ii) cash dividends referred under "— Cash Dividends or Distributions" below), then, once the distribution has become effective and the shares of that Fund (or that successor fund) are trading ex-dividend, the applicable Share Adjustment Factor will be adjusted so that the new Share Adjustment Factor will equal the product of:

- the prior Share Adjustment Factor, and
- a fraction, the numerator of which is the Current Market Price of that Fund (or that successor fund) and the denominator of which is the amount by which the Current Market Price exceeds the Fair Market Value of that distribution.

The "**Current Market Price**" of a Fund (or any relevant successor fund) means the closing price of one share of that Fund (or that successor fund) on the trading day immediately preceding the ex-dividend date of the dividend or distribution requiring an adjustment to the applicable Share Adjustment Factor.

With respect to a Fund, the “**Fair Market Value**” of any distribution means the value of that distribution on the ex-dividend date for that distribution, as determined by the calculation agent. If that distribution consists of property traded on the ex-dividend date on a U.S. national securities exchange, the Fair Market Value will equal the opening price of the distributed property on that ex-dividend date.

The “**ex-dividend date**,” with respect to a dividend or other distribution for a Fund (or any relevant successor fund), means the first trading day on which transactions in the shares of that Fund (or that successor fund) trade on the relevant exchange without the right to receive that dividend or other distribution.

Cash Dividends or Distributions

If a Fund (or any relevant successor fund) pays a dividend or makes a distribution consisting exclusively of cash to all or substantially all holders of shares of that Fund (or that successor fund) during the term of the notes that the calculation agent determines is (a) by its terms or declared intent, declared and paid outside the normal dividend policy or historical dividend practice of that Fund (or that successor fund) or (b) announced by that Fund (or that successor fund) to be an extraordinary dividend, then, once the dividend or distribution has become effective and the shares of that Fund (or that successor fund) are trading ex-dividend, the applicable Share Adjustment Factor will be adjusted so that the new Share Adjustment Factor will equal the product of:

- the prior Share Adjustment Factor, and
- a fraction, the numerator of which is the Current Market Price of that Fund (or that successor fund) and the denominator of which is the amount by which the Current Market Price exceeds the aggregate amount in cash per share of that Fund (or that successor fund) distributed in that cash dividend or distribution in excess of the Dividend Threshold.

The “**Dividend Threshold**” of a Fund (or any relevant successor fund) is (a) with respect to a dividend or other cash distribution paid in lieu of a regularly scheduled dividend, an amount per share of that Fund (or that successor fund), as determined by the calculation agent, that is consistent with the normal dividend policy or historical dividend practice of that Fund (or that successor fund) or (b) with respect to a dividend or other cash distribution that is not paid in lieu of a regularly scheduled dividend, zero.

Discontinuation of a Fund; Alternate Calculation of Closing Price and Trading Price

Unless otherwise specified in the relevant terms supplement, if a Fund (or a successor fund (as defined in this product supplement)) is delisted from the relevant exchange for that Fund (or that successor fund), liquidated or otherwise terminated, the calculation agent will substitute an exchange-traded fund that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Fund (or that successor fund) (such substitute fund being referred to in this product supplement as a “**successor fund**”) and, from and including an effective date determined by the calculation agent in good faith (with respect to that Fund, the “**Successor Date**”):

- the closing price of one share of that Fund on any Determination Date, or any other relevant date on which the closing price of one share of that Fund is to be determined, will be determined by reference to the price of that successor fund with respect to that day;
- the trading price, if applicable, of one share of that Fund at any time on any Determination Date, or any other relevant date on which the trading price of one share of that Fund is to be determined, will be determined by reference to the trading price of that successor fund at that time; and
- the Share Adjustment Factor for the successor fund will be determined by the calculation agent in good faith as of the applicable Successor Date, taking into account, among other

things, the closing price of one share of the original Fund on the trading day immediately preceding the applicable Successor Date, subject to adjustment for certain events related to that successor fund in accordance with "— Anti-Dilution Adjustments."

If a Fund (or a successor fund) is delisted, liquidated or otherwise terminated and the calculation agent determines that no successor fund is available, then (a) the calculation agent will, in its sole discretion, calculate the appropriate closing price of one share of that Fund by a computation methodology that the calculation agent determines will as closely as reasonably possible replicate that Fund and (b) the trading price, if applicable, of that Fund at any time on any relevant day will be deemed to equal the closing price on that day, as determined by the calculation agent. If a successor fund is selected or if the calculation agent calculates a closing price by a computation methodology that the calculation agent determines will as closely as reasonably possible replicate that Fund, that successor fund or closing price will be substituted for that Fund (or that successor fund) for all purposes of the notes.

Upon any selection by the calculation agent of a successor fund, the calculation agent will cause written notice thereof to be promptly furnished to the trustee, the Issuer, the Guarantor (if applicable) and DTC, as holder of the notes.

Unless otherwise specified in the relevant terms supplement, if at any time, a Fund (or a successor fund) or an Underlying Index, if applicable, is changed in a material respect, or a Fund (or a successor fund) in any other way is modified so that it does not, in the opinion of the calculation agent, fairly represent the price of the shares of that Fund (or that successor fund) had those changes or modifications not been made, then the calculation agent will, at the close of business in the City of New York on each date on which the closing price of one share of that Fund (or that successor fund) is to be determined, make such calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a closing price of one share of an exchange-traded fund comparable to that Fund (or that successor fund) as if those changes or modifications had not been made, and calculate the closing price with reference to that Fund (or that successor fund), as adjusted. The calculation agent may also determine that no adjustment is required by the modification of the method of calculation.

The calculation agent will be solely responsible for the method of calculating the closing price of one share of a Fund (or any successor fund) and of any related determinations and calculations, and its determinations and calculations with respect thereto will be conclusive in the absence of manifest error.

The calculation agent will provide information as to the method of calculating the closing price of the shares of a Fund upon written request by any holder of the notes.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

The following is a discussion of the material U.S. federal income and certain estate tax consequences of owning and disposing of notes. 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 the U.S. federal income tax consequences of the ownership or disposition of any Underlying Stock that you may receive at maturity. You should consult your tax adviser regarding the potential U.S. federal income tax consequences of owning and disposing of the Underlying Stock.

For U.S. federal income tax purposes, notes issued by JPMorgan Financial will be treated as if they were issued by JPMorgan Chase & Co. Accordingly, throughout this discussion, references to the Issuer are generally to JPMorgan Chase & Co., unless the context otherwise requires.

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 of this product supplement, changes to any of which, subsequent to the date hereof, may affect the tax consequences described herein. 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 (including the possibility of alternative treatments of the notes), as well as any tax consequences arising under the laws of any state, local or non-U.S. jurisdiction.**

Tax Treatment of the Notes

The tax consequences of an investment in the notes are unclear. There is no direct legal authority as to the proper U.S. federal income tax treatment of the notes, and the Issuer does not intend to request a ruling from the IRS regarding the notes. The tax treatment of the notes for U.S. federal income tax purposes will depend upon the facts at the time of the relevant offering. At the time of the relevant offering, the Issuer may seek an opinion of counsel regarding the tax consequences of owning and disposing of the notes. In this event, whether or not counsel is able to opine regarding the correctness of the treatment the Issuer intends to apply to a particular offering of notes, the Issuer generally expects that counsel will be able to opine that the tax consequences described in the applicable sections below are the material tax consequences of owning and disposing of the notes if that treatment is respected, as well as material tax consequences that may apply if it is not respected.

The following discussion assumes the treatment described in an applicable section below is respected, except where otherwise indicated. The relevant terms supplement may indicate consequences different from those described herein and also may identify other issues applicable to a particular offering of notes.

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.

Notes Treated as Open Transactions That Are Not Debt Instruments

The following describes the material U.S. federal income tax consequences of the ownership and disposition of notes that the Issuer treats as "open transactions" that are not debt instruments for U.S. federal income tax purposes. The relevant terms supplement will indicate whether the Issuer intends to treat the notes as open transactions that are not debt instruments for U.S. federal income tax purposes.

Tax Treatment as Open Transactions That Are Not Debt Instruments. Under this treatment, you should not recognize taxable income or loss other than pursuant to a sale or exchange (including acceleration, early redemption or repurchase, "deemed" taxable exchange, as described below, or maturity). Upon a sale or exchange of a note, you should recognize gain or loss equal to the difference between the amount realized on the sale or exchange and your tax basis in the note, which should equal the amount you paid to acquire it. Subject to the discussion below concerning the potential application of the "constructive ownership" rules under Section 1260 of the Code, this gain or loss should be long-term capital gain or loss if you have held the note for more than one year at that time. The deductibility of capital losses is subject to limitations. Depending on the nature of the Underlying, the IRS might assert that a "deemed" taxable exchange has occurred under certain circumstances. The relevant terms supplement may contain additional disclosure regarding this risk.

If you receive the Physical Delivery Amount at maturity, subject to the potential application of Section 1260, you should not recognize gain or loss with respect to the shares of Underlying Stock you receive. Consistent with this position, you should have an aggregate tax basis in the Physical Delivery Amount (including, if applicable, any cash received in lieu of a fractional share of Underlying Stock) equal to your adjusted tax basis in the notes. Your holding period for the shares you receive should begin on the day after receipt. With respect to any cash received in lieu of a fractional share of Underlying Stock, you should recognize gain or loss in an amount equal to the difference between the amount of that cash and the tax basis allocable to the fractional share.

Potential Application of the Constructive Ownership Rules. If a "pass-thru entity" (such as a Fund) is an underlying asset or a basket component, the notes could be treated as "constructive ownership transactions" within the meaning of Section 1260 of the Code, in which case the tax consequences of a sale or exchange of the notes (including for this purpose receipt of the Physical Delivery Amount, if applicable) could be affected materially and adversely. If a note were treated in whole or in part as a constructive ownership transaction, all or a portion of any long-term capital gain you would otherwise recognize on a sale or exchange of the note would be recharacterized as ordinary income to the extent such gain exceeded the "net underlying long-term capital gain." Under Section 1260, the net underlying long-term capital gain is generally the net long-term capital gain a taxpayer would have recognized by investing in the underlying pass-thru entity at the inception of the constructive ownership transaction and selling that investment on the date the constructive ownership transaction is closed (*i.e.*, at maturity or earlier disposition). If Section 1260 were to apply to a note, it is uncertain how the net underlying long-term capital gain would be computed. It is possible, for instance, where a Fund is the sole underlying asset, that the net underlying long-term capital gain could equal the amount of long-term capital gain you would have recognized if on the issue date you had invested the amount you paid to acquire the note in shares of the Fund and sold those shares for their fair market value on the date your note is sold or exchanged. Unless otherwise established by clear and convincing evidence, the amount of net underlying long-term capital gain is treated as zero. Any long-term capital gain recharacterized as ordinary income under Section 1260 would be treated as accruing at a constant rate over the period you held the note, and you would be subject to a notional interest charge in respect of the deemed tax liability on the income treated as accruing in prior tax years. Unless otherwise indicated in the relevant terms supplement, if a pass-thru entity is an Underlying, due to the lack of governing authority and the fact-sensitive nature of the analysis under Section 1260, the Issuer does not expect that counsel would be able to opine as to whether or how these rules would apply to your notes. You should consult your tax adviser regarding the potential application of the constructive ownership rules.

Uncertainties Regarding Tax Treatment as Open Transactions That Are Not Debt Instruments. If the notes are treated as open transactions that are not debt instruments, due to the lack of controlling authority there remain significant additional uncertainties regarding the tax consequences of owning and disposing of them. For instance, you might be required to include amounts in income during the term of your notes and/or to treat all or a portion of the gain or loss on the sale or exchange of your notes as ordinary income or loss or as short-term capital gain or loss, without regard to how long you have held them. In addition, in 2007 Treasury and the IRS released a notice requesting comments on the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. The notice focuses in particular on whether to require investors in these instruments to accrue income over the term of their investment. It also asks for comments on a number of related topics, including the character of income or loss with respect to these instruments; the relevance of factors such as the nature of the underlying property to which the instruments are linked; and whether these instruments are or should be subject to the "constructive ownership" regime described above. While the notice requests comments on appropriate transition rules and effective dates, any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the notes, possibly with retroactive effect.

Tax Consequences if Treated as Debt Instruments. If the notes are treated as debt instruments, your tax consequences will be governed by Treasury regulations relating to the taxation of "contingent payment debt instruments" if the term of the notes from issue to maturity (excluding the issue date, but including the last possible date that the notes could be outstanding) is more than one year. In this event, regardless of whether you are an accrual-method or cash-method taxpayer, (i) in each year that you hold your notes, you will be required to accrue into income original issue discount ("OID") on your notes at the Issuer's "comparable yield" for similar noncontingent debt, determined at the time of the issuance of the notes (even though you will not receive any cash with respect to the notes prior to maturity) and (ii) any income recognized upon a sale or exchange of your notes generally will be treated as interest income. Additionally, if you recognize a loss above certain thresholds, you might be required to file a disclosure statement with the IRS.

Notes Treated as Units Each Comprising a Put Option and a Deposit

The following describes the material U.S. federal income tax consequences of the ownership and disposition of notes that are treated as units comprising a put option and a deposit for U.S. federal income tax purposes. The relevant terms supplement will indicate whether the Issuer intends to treat the notes as units each comprising a put option and a deposit for U.S. federal income tax purposes. Unless otherwise indicated in the relevant terms supplement, insofar as the Issuer has tax reporting responsibilities with respect to these notes, the Issuer expects (in the absence of an administrative determination or judicial ruling to the contrary) to treat them for U.S. federal income tax purposes as units each comprising (i) a put option written by you (a "Put Option") that is terminated if an early redemption occurs and that, if not terminated, requires you to purchase the Underlying Stock (or, at the Issuer's option, receive the cash value thereof) from the Issuer at maturity for an amount equal to the Deposit (as defined below) under circumstances where the payment due at maturity is the Physical Delivery Amount (or the cash value thereof) and (ii) a deposit of $1,000 per $1,000 principal amount note to secure your potential obligation under the Put Option (the "Deposit"). Under this approach, a portion of each interest payment (including at maturity) made with respect to the notes will be treated as interest on the Deposit, and the remainder as premium paid to you in consideration of your entry into the Put Option (a "Put Premium"). The Issuer will specify in the relevant terms supplement the portion of each interest payment that the Issuer will allocate to interest on the Deposit and to Put Premium, respectively.

Notes with a Term of Not More than One Year

If the term of the notes (including either the issue date or the last possible date that the notes could be outstanding, but not both) is not more than one year, the following discussion applies.

Tax Treatment of Interest Payments. Because the term of the notes is not more than one year, the Deposit will be treated as a short-term obligation for U.S. federal income tax purposes. Under the applicable Treasury regulations, the Deposit will be treated as being issued at a discount equal to the sum of all interest payments to be made with respect to the Deposit. Accordingly, accrual-method holders, and cash-method holders who so elect, will be required to include the discount in income as it accrues on a straight-line basis, unless they elect to accrue the discount on a constant-yield method based on daily compounding. Cash-method holders who do not elect to accrue the discount in income currently will be required to include interest paid on the Deposit upon its receipt. Additionally, cash-method holders who do not elect to accrue the discount in income currently will be required to defer deductions for interest paid on any indebtedness incurred to purchase or carry their notes in amounts not exceeding accrued discount that has not been included in income.

Put Premium will be taken into account as described below.

Sale or Exchange of a Note. Upon sale or exchange of a note prior to maturity (including upon acceleration, early redemption or repurchase), subject to the discussion below regarding non-electing cash-method taxpayers, you generally will be required to recognize an amount of short-term capital gain or loss equal to the difference between (i) the proceeds received and (ii) the purchase price you paid for the note plus accrued but unpaid discount included in income minus the total Put Premium you have received from the Issuer. This amount represents the net of the gain or loss attributable to the termination of the Put Option and the gain or loss attributable to the sale of the Deposit. Notwithstanding the above, if you are a cash-method taxpayer who has not elected to accrue the discount in income currently, you will recognize an amount of ordinary income equal to the lesser of the accrued but unpaid discount on the Deposit and your gain on the Deposit (generally, the proceeds attributable to the Deposit minus the amount you paid to acquire it), and this amount will reduce your short-term capital gain or increase your short-term capital loss, as described above. You should consult your tax adviser regarding the separate determination of gain or loss with respect to the Put Option and the Deposit.

Tax Treatment at Maturity or Early Redemption. If a note is redeemed early or held to maturity and the Put Option expires unexercised (*i.e.*, you receive a cash payment at maturity equal to the amount of the Deposit plus the final interest payment, which will be treated as described above), you will recognize short-term capital gain equal to the sum of all Put Premium payments received.

If you receive the Physical Delivery Amount (plus the final interest payment, which should be treated as described above) at maturity, you should be deemed to have applied the Deposit toward the physical settlement of the Put Option. You should not recognize gain or loss with respect to the Put Premium or the shares of Underlying Stock received. Instead, you should have an aggregate basis in the Physical Delivery Amount of Underlying Stock you receive equal to the Deposit minus the total Put Premium received, and that basis should be allocated proportionately among the shares. Your holding period for the Underlying Stock you receive should begin on the day after receipt. With respect to any cash received in lieu of a fractional share of Underlying Stock, you should recognize short-term capital gain or loss in an amount equal to the difference between the amount of the cash received and the tax basis allocable to the fractional share.

If you receive the cash value of the Physical Delivery Amount (plus the final interest payment, which should be treated as described above), you will be deemed to have applied a portion of the Deposit toward the cash settlement of the Put Option. In that case, you will recognize short-term capital gain or loss in an amount equal to the difference between (i) the cash value of the Physical Delivery Amount plus the total Put Premium received and (ii) the Deposit.

Other Possible Tax Treatments. The IRS might treat the notes as indivisible debt instruments, despite the uncertainty as to what you will receive at maturity. In this event, while they would be subject to the general rules applicable to the Deposit that are described above, a number of aspects of this treatment would be uncertain because the amount due at maturity is not fixed. In addition, you could be subject to special reporting requirements if any loss exceeded certain thresholds.

Alternatively, the notice described above in "— Notes Treated as Open Transactions That Are Not Debt Instruments — Uncertainties Regarding Tax Treatment as Open Transactions That Are Not Debt Instruments" may apply to your notes. While it is not entirely clear whether the notes would be viewed as similar to the typical prepaid forward contract described in the notice, or whether the scope of the notice extends to short-term instruments such as the notes, it is possible that any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the notes, possibly with retroactive effect. The notice focuses on a number of issues, the most relevant of which for U.S. Holders of short-term notes are the timing and character of income or loss (including whether the Put Premium might be currently included as ordinary income). You should consult your tax adviser regarding the U.S. federal income tax consequences of an investment in the notes, including possible alternative treatments and the issues presented by this notice.

Notes with a Term of More than One Year

If the term of the notes (including either the issue date or the last possible date that the notes could be outstanding, but not both) is more than one year, the following discussion applies.

Tax Treatment of Interest Payments. Interest paid with respect to the Deposit will be taxable to you as ordinary income at the time it accrues or is received, in accordance with your method of accounting for U.S. federal income tax purposes.

Put Premium will be taken into account as described below.

Sale or Exchange of a Note. Upon sale or exchange of a note prior to maturity, you will be treated as receiving a payment of interest equal to any accrued but unpaid interest on the Deposit, which will be treated as described above. The Deposit will be treated as sold for its fair market value, excluding any accrued but unpaid interest. The amount of capital gain or loss on the Deposit will equal the amount realized that is attributable to the Deposit, minus your tax basis in the Deposit. That gain or loss will be long-term capital gain or loss if the note was held for more than one year.

If the value of the Deposit on the date of sale or exchange of a note is less than the amount realized on the sale or exchange of the note, any amount realized that is attributable to the Put Option, together with the total Put Premium received over the term of the notes, will be treated as short-term capital gain or loss.

If the value of the Deposit on the date of sale or exchange exceeds the amount realized on the sale or exchange of the note, you will be treated as having (i) sold or exchanged the Deposit for an amount equal to its value on that date and (ii) made a payment to the purchaser of the note equal to the amount of this excess, in exchange for the purchaser's assumption of the Put Option. In this case, you will be required to recognize short-term capital gain or loss in respect of the Put Option equal to the total Put Premium received over the term of the note minus the amount deemed to be paid by you in exchange for the purchaser's assumption of the Put Option.

Tax Treatment at Maturity or Early Redemption. If a note is redeemed early or held to maturity and the Put Option expires unexercised (*i.e.*, you receive a cash payment at maturity equal to the amount of the Deposit plus the final interest payment, which will be treated as described above), you will recognize short-term capital gain equal to the sum of all Put Premium payments received.

If you receive the Physical Delivery Amount (plus the final interest payment, which should be treated as described above) at maturity, you should be deemed to have applied the Deposit toward the physical settlement of the Put Option. In that case, you should not recognize gain or loss with respect to the Put Premium or the shares of Underlying Stock received. Instead, you should have an aggregate basis in the Physical Delivery Amount of Underlying Stock you receive equal to the Deposit minus the Put Premium received, and that basis should be allocated proportionately among the shares. Your holding period for the Underlying Stock you receive should begin on the day after receipt. With respect to any cash received in lieu of a fractional share of Underlying Stock, you should recognize short-term capital gain or loss in an amount equal to the difference between the amount of the cash received and the tax basis allocable to the fractional share.

If you receive the cash value of the Physical Delivery Amount (plus the final interest payment, which will be treated as interest as described above), you will be deemed to have applied a portion of the Deposit toward the cash settlement of the Put Option. In that case, you will recognize short-term capital gain or loss in an amount equal to the difference between (i) the cash value of the Physical Delivery Amount plus the total Put Premium received and (ii) the Deposit.

Other Possible Tax Treatments. The IRS might treat the notes as "contingent payment debt instruments." In that event, regardless of whether you are an accrual-method or cash-method taxpayer, (i) in each year that you hold your notes, you will be required to accrue into income original issue discount on your notes at the Issuer's "comparable yield" for similar noncontingent debt, determined at the time of the issuance of the notes and (ii) any income recognized at maturity or upon sale or exchange of your notes (including on receipt of the Physical Delivery Amount at maturity) generally will be treated as interest income. In addition, you could be subject to special reporting requirements if any loss exceeded certain thresholds. You should consult your tax adviser regarding these issues.

Alternatively, the notice described above in "— Notes with a Term of Not More than One Year — Other Possible Tax Treatments" may apply to your notes. While it is not entirely clear whether the notes would be viewed as similar to the typical prepaid forward contract described in the notice, it is possible that any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the notes, possibly with retroactive effect. The notice focuses on a number of issues, the most relevant of which for U.S. Holders of the notes are the timing and character of income or loss (including whether the Put Premium might be currently included as ordinary income).

Notes Treated as Prepaid Forward Contracts with Associated Contingent Coupons

The following describes the material U.S. federal income tax consequences of owning and disposing of notes that the Issuer treats as prepaid forward contracts with associated contingent coupons for U.S. federal income tax purposes ("Contingent Interest Notes"). The relevant terms supplement will indicate whether the Issuer intends to treat an offering of notes as Contingent Interest Notes. Unless otherwise indicated in the relevant terms supplement, insofar as the Issuer has tax reporting responsibilities with respect to these notes, the Issuer intends to treat them as prepaid forward contracts with associated contingent coupons for U.S. federal income tax purposes.

Tax Treatment of Contingent Interest Payments. Although the U.S. federal income tax treatment of contingent interest payments (including any contingent interest payment made in connection with an acceleration, early redemption or repurchase or at maturity) is uncertain, the Issuer expects (in the absence of an administrative determination or judicial ruling to the contrary) to treat any contingent interest payments with respect to the notes as ordinary income, unless otherwise indicated in the relevant terms supplement.

Sale or Exchange of a Note. Upon a sale or exchange of a note (including an acceleration, early redemption or repurchase or at maturity), you should recognize capital gain or loss equal to the difference between the amount realized on the sale or exchange and your tax basis in the note, which should equal the amount you paid to acquire the note (assuming contingent interest payments are properly treated as ordinary income, consistent with the position described above). This gain or loss should be long-term capital gain or loss if you have held the note for more than one year at that time. The deductibility of capital losses is subject to limitations. If you sell your note between the time your right to a contingent interest payment is fixed and the time it is paid, it is likely that you will be treated as receiving ordinary income equal to the contingent interest payment. Although uncertain, it is possible that proceeds received from the sale or exchange of your note prior to a Determination Date but that can be attributed to an expected contingent interest payment could be treated as ordinary income. You should consult your tax adviser regarding this issue.

If you receive the Physical Delivery Amount, you should be deemed to have applied the purchase price of your note toward the purchase of the shares of Underlying Stock you receive. You should not recognize gain or loss with respect to the receipt of those shares. Instead, assuming contingent interest payments are properly treated as ordinary income, consistent with the position described above, your basis in the Physical Delivery Amount should equal the price you paid to acquire your note, and that basis should be allocated proportionately among the shares. Your holding period for the Underlying Stock you receive should begin on the day after receipt. With respect to any cash received in lieu of a fractional share of Underlying Stock, you should recognize capital gain or loss in an amount equal to the difference between the amount of cash received and the tax basis allocable to the fractional share.

Uncertainties Regarding Tax Treatment as Prepaid Forward Contracts with Associated Contingent Coupons. If the notes are treated as prepaid forward contracts with associated contingent coupons, due to the lack of controlling authority there remain significant uncertainties regarding the tax consequences of owning and disposing of them. For instance, you might be required to include amounts in income during the term of your notes in addition to the contingent interest payments you receive, and/or to treat all or a portion of the gain or loss on the sale or exchange of your notes (in addition to any amounts attributable to an unpaid contingent interest payment, as discussed above) as ordinary income or loss or as short-term capital gain or loss, without regard to how long you have held them.

Alternatively, the notice described above in "— Notes with a Term of Not More than One Year — Other Possible Tax Treatments" may apply to your notes. While it is not entirely clear whether the notes would be viewed as similar to the typical prepaid forward contract described in the notice, it is possible that any Treasury regulations or other guidance promulgated after consideration of these issues could materially affect the tax consequences of an investment in the notes, possibly with retroactive effect.

Tax Consequences if Treated as Debt Instruments. If the notes are treated as debt instruments, your tax consequences will be governed by Treasury regulations relating to the taxation of "contingent payment debt instruments" if the term of the notes from issuance to maturity (excluding the issue date, but including the last possible date that the notes could be outstanding) is more than one year. In this event, regardless of whether you are an accrual-method or cash-method taxpayer, in each year that you hold your notes, you will be required to accrue into income original issue discount on your notes at the Issuer's "comparable yield" for similar noncontingent debt, determined at the time of the issuance of the notes, subject to certain adjustments, with the result that your taxable income in any year could differ significantly from the contingent interest payments (if any) you receive in that year. In addition, any gain recognized upon a sale or exchange of your notes generally will be treated as interest income, and if you recognize a loss above certain thresholds, you might be required to file a disclosure statement with the IRS.

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 upon acceleration, early redemption or repurchase or at maturity).

Subject to the discussions below, any income or gain from a note that the Issuer treats as (i) an open transaction that is not a debt instrument or (ii) a unit comprising a Put Option and a Deposit should not be subject to U.S. federal income tax (including withholding tax) if you provide a properly completed applicable IRS Form W-8 and these amounts are not effectively connected with your conduct of a U.S. trade or business.

However, among the issues addressed in the notice described above in "— Tax Consequences to U.S. Holders — Notes Treated as Open Transactions That Are Not Debt Instruments — Uncertainties Regarding Tax Treatment as Open Transactions That Are Not Debt Instruments" is the degree, if any, to which income with respect to instruments described therein should be subject to U.S. withholding tax. It is possible that any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the withholding tax consequences of an investment in a note that is treated as an open transaction that is not a debt instrument or as a Put Option and Deposit, possibly with retroactive effect.

If you own a Contingent Interest Note, although the Issuer believes it is reasonable to take a position that contingent interest payments made on those notes are not subject to withholding tax (at least if an applicable IRS Form W-8 is provided, and subject to the discussions below of Section 871(m) and FATCA), a withholding agent may nonetheless withhold on these payments (generally at a rate of 30%, subject to the possible reduction of that rate under an applicable income tax treaty), unless income from your notes is effectively connected with your conduct of a trade or business in the United States (and, if an applicable income tax treaty so requires, is attributable to a permanent establishment in the United States).

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.

Regulations under Section 871(m) impose a 30% withholding tax on certain "dividend equivalents" paid or deemed paid with respect to derivatives linked to U.S. stocks or indices that include U.S. stocks under certain circumstances, even in cases where the derivatives do not provide for payments explicitly linked to dividends. In general, this withholding regime applies to derivatives that substantially replicate the economic performance of one or more underlying U.S. stocks, as determined on the derivatives' issue date, based on one of two tests set forth in the regulations. The regulations provide certain exceptions to the withholding requirements, for example for derivatives linked to certain broad-based indices. Additionally, an IRS notice excludes from the scope of Section 871(m) instruments issued prior to January 1, 2023 that do not have a delta of one with respect to underlying securities that could pay U.S.-source dividends for U.S. federal income tax purposes.

The Issuer will disclose further information regarding the application of Section 871(m) in the relevant terms supplement. The Issuer's determination as to whether Section 871(m) applies to a series of notes is binding on Non-U.S. Holders, but it is not binding on the IRS. The Section 871(m) regulations require complex calculations to be made with respect to derivatives linked to U.S. stocks, and their application to a specific series of notes may be uncertain. Accordingly, even if the Issuer determines that Section 871(m) does not apply to a series of notes, the IRS could challenge the Issuer's determination and assert that withholding is required in respect of those notes. Additionally, the application of Section 871(m) may be affected by a Non-U.S. Holder's particular circumstances (for example, where a Non-U.S. Holder enters into two or more transactions that reference the same underlying security and the transactions were entered into in connection with each other). You should consult your tax adviser regarding the potential application of Section 871(m) to a series of notes.

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

Federal Estate Tax

Individual Non-U.S. Holders, and entities the property of which is potentially includible in those individuals' gross estates 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), should note that, absent an applicable treaty benefit, a note is likely to be treated as U.S.-situs property, subject to U.S. federal estate tax. These individuals and entities should consult their tax advisers regarding the U.S. federal estate tax consequences of investing in a note.

Backup Withholding and Information Reporting

You may be subject to information reporting. 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) 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 may apply to amounts properly treated as interest or other "fixed or determinable annual or periodical" income ("FDAP Income") for U.S. federal income tax purposes paid with respect to a note. If a note is treated in whole or in part as indebtedness, withholding could also apply to payments of gross proceeds of a taxable disposition, including early redemption or repurchase, acceleration or redemption at maturity. However, under regulations proposed in 2018 (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 FDAP Income). 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.

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

PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

Under (a) the terms and subject to the conditions contained in the Master Agency Agreement entered into between JPMorgan Chase & Co., as issuer, and J.P. Morgan Securities LLC, as agent (with respect to notes issued by JPMorgan Chase & Co., an "**Agent**" or "**JPMS**"), UBS Financial Services Inc. (an "**Agent**" or "**UBS**") and certain other agents that are or may become party to that Master Agency Agreement, as amended or supplemented, from time to time (with respect to notes issued by JPMorgan Chase & Co., each an "**Agent**" and collectively with JPMS and UBS, the "**Agents**") and (b) the terms and subject to the conditions contained in the Master Agency Agreement entered into among JPMorgan Financial, as issuer, JPMorgan Chase & Co., as guarantor, and J.P. Morgan Securities LLC, as agent (with respect to notes issued by JPMorgan Financial, an "**Agent**" or "**JPMS**"), UBS Financial Services Inc. (an "**Agent**" or "**UBS**") and certain other agents that are or may become party to that Master Agency Agreement, as amended or supplemented, from time to time (with respect to notes issued by JPMorgan Financial, each an "**Agent**" and collectively with JPMS and UBS, the "**Agents**"), each Agent participating in an offering of securities, acting as principal for its own account or as placement agent for certain advisory accounts for which it acts as an investment advisor, has agreed to purchase, and the Issuer and the Guarantor (if applicable) have agreed to sell, the principal amount of notes set forth in the cover page of the relevant terms supplement.

Each such Agent proposes initially to offer the securities directly to the public at the public offering price set forth on the cover of the relevant terms supplement. JPMS will allow a concession to other dealers, or the Issuer may pay other fees, in the amount set forth on the cover page of the relevant terms supplement. After the initial offering of the securities, the Agents may vary the offering price and other selling terms from time to time.

The Issuer's and the Guarantor's (if applicable) affiliates, including JPMS, may use this product supplement, any accompanying underlying supplement and the prospectus supplement, prospectus or terms supplement in connection with offers and sales of the notes in the secondary market. JPMS or another Agent may act as principal or agent in connection with offers and sales of the notes in the secondary market. Secondary market offers and sales will be made at prices related to market prices at the time of that offer or sale; accordingly, the Agents or a dealer may change the public offering price, concession and discount after the offering has been completed.

Unless otherwise specified in the relevant terms supplement, there is currently no public trading market for the notes. In addition, unless otherwise specified in the relevant terms supplement, the Issuer has not applied and does not intend to apply to list the notes on any securities exchange or to have the notes quoted on a quotation system. JPMS may act as a market-maker for the notes. However, JPMS is not obligated to do so and may discontinue any market-making in the notes at any time in its sole discretion. Therefore, there are no assurances that a liquid trading market for the notes will develop, that you will be able to sell your notes at a particular time or that the price you receive if you sell your notes will be favorable.

In connection with an offering of the notes, JPMS may engage in overallotment, stabilizing transactions and syndicate covering transactions in accordance with Regulation M under the Securities Exchange Act of 1934. Overallotment involves sales in excess of the offering size, which create a short position for JPMS. Stabilizing transactions involve bids to purchase the notes in the open market for the purpose of pegging, fixing or maintaining the price of the notes. Syndicate covering transactions involve purchases of the notes in the open market after the distribution has been completed in order to cover short positions. Stabilizing transactions and syndicate covering transactions may cause the price of the notes to be higher than it would otherwise be in the absence of those transactions. If JPMS engages in stabilizing or syndicate covering transactions, it may discontinue them at any time.

Certain of the Agents engage in transactions with and perform services for the Issuer, the Guarantor (if applicable) and their affiliates in the ordinary course of business.

No action has been or will be taken by the Issuer, the Guarantor (if applicable), JPMS or any dealer that would permit a public offering of the notes or possession or distribution of this product supplement, any accompanying underlying supplement or the prospectus supplement, prospectus or terms supplement, other than in the United States, where action for that purpose is required. No offers, sales or deliveries of the notes, or distribution of the relevant terms supplement, this product supplement, any underlying supplement, the prospectus supplement or the prospectus or any other offering material relating to the notes, may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws and regulations and will not impose any obligations on the Issuer, the Guarantor (if applicable), the Agents or any dealer.

Each Agent has represented and agreed that it will not offer or sell the notes in any non-U.S. jurisdiction (i) if that offer or sale would not be in compliance with any applicable law or regulation or (ii) if any consent, approval or permission is needed for that offer or sale by that Agent or for or on the Issuer's or the Guarantor's (if applicable) behalf, unless the consent, approval or permission has been previously obtained. The Issuer and the Guarantor (if applicable) will have no responsibility for, and the applicable Agent will obtain, any consent, approval or permission required by that Agent for the subscription, offer, sale or delivery by that Agent of the notes, or the distribution of any offering materials, under the laws and regulations in force in any non-U.S. jurisdiction to which that Agent is subject or in or from which that Agent makes any subscription, offer, sale or delivery. For additional information regarding selling restrictions, please see "Notice to Investors; Selling Restrictions" in the accompanying prospectus supplement.

Unless otherwise specified in the relevant terms supplement, the settlement date for the notes will be the third business day following the pricing date (which is referred to as a "T+3" settlement cycle). Under Rule 15c6-1 of the Securities Exchange Act of 1934, as amended, trades in the secondary market generally are required to settle in two business days, unless the parties to that trade expressly agree otherwise. Accordingly, purchasers who wish to trade notes on any date prior to two business days before delivery will be required to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement and should consult their own advisors.

Conflicts of Interest

JPMS has a "conflict of interest" within the meaning of FINRA Rule 5121 in any offering of the notes in which it participates because JPMorgan Chase & Co. owns, directly or indirectly, all of the outstanding equity securities of JPMS, because JPMS and JPMorgan Financial are under common control by JPMorgan Chase & Co. and because the net proceeds received from the sale of the notes will be used, in part, by JPMS or its affiliates in connection with hedging the Issuer's obligations under the notes. The offer and sale of the notes by JPMS will comply with the requirements of FINRA Rule 5121 regarding a FINRA member firm's participation in a public offering of notes of an affiliate. In accordance with FINRA Rule 5121, neither JPMS nor any other affiliated underwriter, agent or dealer of the Issuer may sell the notes to any of its discretionary accounts without the specific written approval of the customer.

BENEFIT PLAN INVESTOR CONSIDERATIONS

A fiduciary of a pension, profit-sharing or other employee benefit plan subject to Title I of the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), including entities such as collective investment funds, partnerships and separate accounts whose underlying assets include the assets of such plans (collectively, "**ERISA Plans**"), should consider the fiduciary standards of ERISA in the context of the ERISA Plan's particular circumstances before authorizing an investment in the notes. Among other factors, the fiduciary should consider whether the investment would satisfy the prudence and diversification requirements of ERISA and would be consistent with the documents and instruments governing the ERISA Plan.

Section 406 of ERISA and Section 4975 of the Code prohibit ERISA Plans, as well as plans (including individual retirement accounts and Keogh plans) subject to Section 4975 of the Code (together with ERISA Plans, "**Plans**"), from engaging in certain transactions involving the "plan assets" with persons who are "parties in interest" under ERISA or "disqualified persons" under Section 4975 of the Code (in either case, referred to herein as "**Parties in Interest**") with respect to such Plans. As a result of JPMorgan Chase & Co.'s business, it, and its current and future affiliates (including JPMorgan Financial), may be Parties in Interest with respect to many Plans. Where the Issuer or the Guarantor (or one of their affiliates) is a Party in Interest with respect to a Plan (either directly or by reason of such entity's ownership interests in its directly or indirectly owned subsidiaries), the purchase and holding of the notes by or on behalf of the Plan could be a prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Code, unless statutory or administrative exemptive relief were available.

In this regard, certain prohibited transaction class exemptions ("**PTCEs**") issued by the U.S. Department of Labor may provide exemptive relief for direct or indirect prohibited transactions resulting from the purchase or holding of the notes. Those class exemptions are PTCE 96-23 (for certain transactions determined by in-house asset managers), PTCE 95-60 (for certain transactions involving insurance company general accounts), PTCE 91-38 (for certain transactions involving bank collective investment funds), PTCE 90-1 (for certain transactions involving insurance company separate accounts) and PTCE 84-14 (for certain transactions determined by independent qualified asset managers). In addition, ERISA Section 408(b)(17) and Section 4975(d)(20) of the Code may provide a limited exemption for the purchase and sale of the notes and related lending transactions, *provided* that neither the issuer of the notes nor any of its affiliates have or exercise any discretionary authority or control or render any investment advice with respect to the assets of the Plan involved in the transaction and *provided further* that the Plan pays no more, and receives no less, than adequate consideration in connection with the transaction (the so-called "**service provider exemption**"). There can be no assurance that any of these statutory or class exemptions will be available with respect to transactions involving the notes.

Accordingly, the notes may not be purchased or held by any Plan, any entity whose underlying assets include "plan assets" by reason of any Plan's investment in the entity (a "**Plan Asset Entity**") or any person investing "plan assets" of any Plan, unless such purchaser or holder is eligible for the exemptive relief available under PTCE 96-23, 95-60, 91-38, 90-1 or 84-14 or the service-provider exemption or there is some other basis on which the purchase and holding of the notes will not constitute or result in a non-exempt prohibited transaction under ERISA or Section 4975 of the Code. Each purchaser or holder of the notes or any interest therein will be deemed to have represented by its purchase or holding of the notes that (a) it is not a Plan or a Plan Asset Entity and its purchase and holding of the notes is not made on behalf of or with "plan assets" of any Plan or a Plan Asset Entity or (b) its purchase and holding of the notes will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code.

In this regard, certain governmental plans (as defined in Section 3(32) of ERISA), church plans (as defined in Section 3(33) of ERISA) and non-U.S. plans (as described in Section 4(b)(4) of ERISA) ("**Non-ERISA Arrangements**") are not subject to these "prohibited transaction" rules of ERISA or Section 4975 of the Code, but may be subject to similar rules under other applicable laws or regulations ("**Similar Laws**"). Accordingly, each such purchaser or holder of the notes will be required to represent (and deemed to have represented by its purchase or holding of the notes) that such purchase and holding will not constitute or result in a violation of any applicable Similar Laws.

Due to the complexity of these rules, it is particularly important that fiduciaries or other persons considering purchasing the notes on behalf of or with "plan assets" of any Plan, Plan Asset Entity or Non-ERISA Arrangement consult with their counsel regarding the relevant provisions of ERISA, the Code or applicable Similar Laws and the availability of exemptive relief under PTCE 96-23, 95-60, 91-38, 90-1, 84-14, the service provider exemption or some other basis on which the acquisition and holding will not constitute or result in a non-exempt prohibited transaction under ERISA or Section 4975 of the Code or a violation of any applicable Similar Laws.

The notes are contractual financial instruments. The financial exposure provided by the notes is not a substitute or proxy for, and is not intended as a substitute or proxy for, individualized investment management or advice for the benefit of any purchaser or holder of the notes. The notes have not been designed and will not be administered in a manner intended to reflect the individualized needs and objectives of any purchaser or holder of the notes.

Each purchaser or holder of any notes acknowledges and agrees that:

(i) the purchaser or holder or its fiduciary has made and will make all investment decisions for the purchaser or holder and the purchaser or holder has not relied and will not rely in any way upon the Issuer, the Guarantor (if applicable) or any of their affiliates to act as a fiduciary or adviser of the purchaser or holder with respect to (A) the design and terms of the notes, (B) the purchaser or holder's investment in the notes, or (C) the exercise of or failure to exercise any rights the purchaser or holder or the Issuer or the Guarantor (if applicable) has under or with respect to the notes;

(ii) the Issuer and its affiliates have acted and will act solely for the Issuer's own account in connection with (A) all transactions relating to the notes and (B) all hedging transactions in connection with its obligations under the notes;

(iii) any and all assets and positions relating to hedging transactions by the Issuer or its affiliates are assets and positions of those entities and are not assets and positions held for the benefit of the purchaser or holder;

(iv) the Issuer's and the Guarantor's (if applicable) interests are adverse to the interests of the purchaser or holder; and

(v) none of the Issuer, the Guarantor (if applicable) and any of their affiliates is a fiduciary or adviser of the purchaser or holder in connection with any such assets, positions or transactions, and any information that the Issuer, the Guarantor (if applicable) or any of their affiliates may provide is not intended to be impartial investment advice.

Each purchaser and holder of the notes has exclusive responsibility for ensuring that its purchase, holding and subsequent disposition of the notes does not violate the fiduciary or prohibited transaction rules of ERISA, the Code or any applicable Similar Laws. The sale of any notes to any Plan, Plan Asset Entity or Non-ERISA Arrangement is in no respect a representation or advice by the Issuer, the Guarantor (if applicable) or any of their affiliates or representatives as to whether such an investment is appropriate for, or meets all relevant legal requirements with respect to investments by, Plans, Plan Asset Entities or Non-ERISA Arrangements generally or any particular Plan, Plan Asset Entity or Non-ERISA Arrangement.