

## JPMORGAN CHASE & CO.

### Interest Rate-Linked Notes / Interest Rate and Equity Index-Linked Notes

## JPMORGAN CHASE FINANCIAL COMPANY LLC

### Interest Rate-Linked Notes / Interest Rate and Equity Index-Linked Notes

### Fully and Unconditionally Guaranteed by JPMorgan Chase & Co.

#### General

- Each of JPMorgan Chase & Co. and JPMorgan Chase Financial Company LLC may from time to time offer and sell notes linked to (a) one or more fixed or floating interest rates or (b) one or more fixed or floating interest rates and/or one or more equity indices.
- 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 Base Rate or Index 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-51 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 <b>"Issuer."</b> 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 <b>"Guarantor."</b>
Underlyings:	Any floating interest rate (each, a <b>"Base Rate"</b> ) or equity index (each, an <b>"Index"</b> ) referenced in the determination of any payment on the notes is referred to in this product supplement as an <b>"Underlying"</b> and, collectively, as the <b>"Underlyings."</b> 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. <i>For notes linked in whole or in part to a Non-U.S. Index (as defined below), the timing and amount of any payment on the notes may be affected by the occurrence of a change-in-law event. See "General Terms of Notes — Consequences of a Change-in-Law Event" for additional information.</i>
Determination Date(s) and Observation Date(s):	The relevant terms supplement will specify, if applicable, each interest reset date or other date on which the value of any Underlying is to be referenced in the determination of (a) any interest payment on the notes (each, a <b>"Determination Date"</b> ) and (b) the payment at maturity on the notes (each, an <b>"Observation Date"</b> ). Unless otherwise specified in the relevant terms supplement, for notes with a payment at maturity linked to one or more Indices, each Observation Date is subject to postponement as described under "General Terms of Notes — Postponement of an Observation Date for Notes with a Payment at Maturity Linked to One or More Indices."
Payment Date(s):	The relevant terms supplement will specify the interest payment dates, the maturity date and any other date on which amounts will or may be payable on the notes (each, a <b>"Payment Date"</b> ). Unless otherwise specified in the relevant terms supplement, each Payment Date is subject to the Business Day Convention and Interest Accrual Convention described under "Description of Notes — Payments on the Notes — Business Day and Interest Accrual Conventions" and, for notes with a payment at maturity linked to one or more Indices, the maturity date is also subject to postponement as described under "General Terms of Notes — Postponement of the Maturity Date for Notes with a Payment at Maturity Linked to One or More Indices."

**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-11 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

## TABLE OF CONTENTS

	<u>Page</u>
Risk Factor Summary.....	PS-1
Description of Notes.....	PS-3
Estimated Value and Secondary Market Prices of the Notes .....	PS-9
Risk Factors .....	PS-11
Use of Proceeds and Hedging .....	PS-31
General Terms of Notes.....	PS-33
The Underlyings .....	PS-40
Material U.S. Federal Income Tax Consequences .....	PS-51
Plan of Distribution (Conflicts of Interest).....	PS-67
Benefit Plan Investor Considerations .....	PS-69

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. 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.

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 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.
- If the notes are redeemed early, you will be exposed to reinvestment risk and may receive less than the market value of the notes.
- If the notes are redeemed early, the aggregate amount of interest paid to you will be less than the aggregate amount of interest payable over the term of the notes if held to maturity.
- The notes are designed to be held to maturity and secondary trading may be limited.
- Floating rate notes present different investment considerations than fixed rate notes or similar floating rate securities.
- The Interest Rate on the notes for any Interest Period will be limited by a maximum rate, if applicable.
- For floating rate notes or notes with an accrual provision, the Interest Rate for an Interest Period may be equal to zero.
- If the relevant terms supplement specifies that the notes will be offered for resale at varying prices, the price you pay for the notes may be higher than the prices paid by other investors.
- For notes linked in whole or in part to a Non-U.S. Index, if a change-in-law event occurs, the timing and amount of any payment on the notes could be affected.
- The tax consequences of an investment in certain of 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 Least Performing Index Notes**

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

### **Risks Relating to a Base Rate**

- A Base Rate will be affected by a number of factors and may be volatile.
- A Base Rate and the manner in which it is calculated may change in the future.
- SOFR has a limited history and its future performance cannot be predicted based on historical performance.
- The composition and characteristics of SOFR are not the same as those of LIBOR and there is no guarantee that SOFR (or Compounded SOFR) is a comparable substitute for LIBOR.

- Any failure of SOFR to gain market acceptance could adversely affect notes linked to Compounded SOFR.
- The secondary market for notes linked to Compounded SOFR may be limited.
- The administrator of SOFR may make changes that could adversely affect the level of SOFR or discontinue SOFR and has no obligation to consider your interest in doing so.
- Compounded SOFR may be replaced by a successor or substitute interest rate.
- The U.S. Dollar SOFR ICE Swap Rates have limited histories and future performance cannot be predicted based on historical performance.
- The U.S. Dollar SOFR ICE Swap Rates are subject to certain risks relating to SOFR.
- A U.S. Dollar SOFR ICE Swap Rate may be determined by the calculation agent in its sole discretion or, if it is discontinued or ceased to be published permanently or indefinitely, replaced by a successor or substitute rate.
- The CPI itself and the way the BLS calculates the CPI may change in the future.
- For notes linked to the CPI, the CPI Rate may not reflect the actual levels of inflation affecting holders of the notes.

### **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.
- You will have no ownership rights in any Index or any of the securities underlying any Index.
- Concentration risks may adversely affect the value of the notes.
- Governmental legislative and regulatory actions, including sanctions, could adversely affect your investment in the notes.
- For notes with a payment at maturity linked to one or more Indices, market disruptions may adversely affect your return.

### **Risks Relating to a Non-U.S. Index**

- If the prices of the non-U.S. components of a Non-U.S. Index are not converted into U.S. dollars for purposes of calculating the value of that Index, any amount payable on the notes will not be adjusted for changes in exchange rates that might affect that Index.
- If the prices of the non-U.S. components of a Non-U.S. Index are converted into U.S. dollars for purposes of calculating the value of that Index, 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.

## 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 Interest Rate-Linked Notes or Interest Rate and Equity Index-Linked Notes.*

### General

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 Base Rate or Index (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 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. Unless otherwise specified in the relevant terms supplement, notes issued by JPMorgan Financial will initially be represented by a type of global note referred to as a master note. A master note represents multiple securities that may be issued at different times and that may have different terms. Unless

otherwise specified in the relevant terms supplement, in connection with each issuance of notes by JPMorgan Financial, the trustee and/or paying agent will, in accordance with instructions from the Issuer, make appropriate entries or notations in its records relating to the master note representing the notes to indicate that the master note evidences the notes of that issuance.

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, 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 may be linked to one or more floating interest rates (each, a **“Base Rate”**) or equity indices (each, an **“Index”**) as specified in the relevant terms supplement. Any Base Rate or Index 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. 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.”**

### **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 Non-U.S. Index, the timing and amount of any payment on the notes may be affected by the occurrence of a change-in-law event. See “General Terms of Notes — Consequences of a Change-in-Law Event” for additional information.*

The relevant terms supplement will specify the interest payment dates, 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 the Business Day Convention and Interest Accrual Convention described under “— Business Day and Interest Accrual Conventions” and, for notes with a payment at maturity linked to one or more Indices, the maturity date is also subject to postponement as described under “General Terms of Notes — Postponement of the Maturity Date for Notes with a Payment at Maturity Linked to One or More Indices.”

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***

Unless otherwise specified in the relevant terms supplement, the notes will bear interest (a) at one or more fixed and/or floating rates or (b) that is linked to one or more floating rates and/or one or more Indices from and including the issue date of the notes to but excluding the maturity date or the date on which the notes are redeemed early, if applicable.

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

$$\text{Principal Amount} \times \text{Interest Rate} \times \text{Day Count Fraction},$$

where the Interest Rate and Day Count Fraction are determined with respect to the relevant Interest Period as set forth below under “Interest Rates” and “Day Count Fraction,” respectively.

Unless otherwise specified in the relevant terms supplement, interest will be payable in arrears on each interest payment date to the holders of record at the close of business on the business day prior to that interest payment date. Any payment of interest is subject to the Business Day Convention and Interest Accrual Convention described under “— Business Day and Interest Accrual Conventions.”

The interest payment dates will be as specified in the relevant terms supplement, subject to the Business Day Convention and the Interest Accrual Convention described under “— Business Day and Interest Accrual Conventions.”

Unless otherwise specified in the relevant terms supplement, an “**Interest Period**” will be the period beginning on and including the issue date of the notes and ending on but excluding the first interest payment date, and each successive period beginning on and including an interest payment date and ending on but excluding the next succeeding interest payment date or, if the notes are subject to an early redemption and have been redeemed prior to such next succeeding interest payment date, ending on but excluding the date on which the notes are redeemed early. Each Interest Period is subject to the Business Day Convention and the Interest Accrual Convention described under “— Business Day and Interest Accrual Conventions.”

### ***Interest Rates***

The “**Interest Rate**” with respect to each Interest Period will be a fixed rate or a floating rate determined by reference to an interest rate formula, in each case as specified in the relevant terms supplement. The Interest Rate may reflect a Base Rate or the spread between Base Rates, may be adjusted by a positive or negative spread or by a spread multiplier and may be subject to a minimum or maximum rate. In addition, the relevant terms supplement may specify that an accrual provision applies to the Interest Rate, in which case interest will accrue on a given day during the relevant Interest Period only if each condition specified in the relevant terms supplement has been satisfied.

If the Interest Rate for any Interest Period is determined by reference to a Base Rate, for purposes of the determination of the Interest Rate for an Interest Period, that Base Rate will be reset on each interest reset date specified in the relevant terms supplement. Unless otherwise specified in the relevant terms supplement, each Base Rate on each interest reset date or other date on which the value of any Underlying is to be referenced in the determination of any interest payment on the notes (each, a “**Determination Date**”) will be determined as set forth under “The Underlyings — Base Rates” in this product supplement or as set forth in the relevant terms supplement.

### ***Day Count Fraction***

Each interest payment on the notes will be calculated by reference to a “**Day Count Convention**” that will be specified in the relevant terms supplement as “Actual/Actual,” “Actual/Actual (ISDA),” “Act/Act,” “Act/Act (ISDA),” “Actual/365,” “Actual/365 (Fixed),” “Act/365 (Fixed),” “A/365 (Fixed),” “A/365F,” “Actual/360,” “Act/360,” “A/360,” “30/360,” “360/360” or “Bond Basis.” With respect to each

Interest Period, the “**Day Count Fraction**” will be determined based on the Day Count Convention as follows:

- if the relevant terms supplement specifies that the Day Count Convention is “Actual/Actual,” “Actual/Actual (ISDA),” “Act/Act” or “Act/Act (ISDA),” the Day Count Fraction will equal the actual number of days in the Interest Period in respect of which payment is being made *divided* by 365 (or, if any of the Interest Period falls in a leap year, the sum of (i) the actual number of days in the portion of the Interest Period falling in a leap year *divided* by 366 and (ii) the actual number of days in that portion of the Interest Period falling in a non-leap year divided by 365);
- if the relevant terms supplement specifies that the Day Count Convention is “Actual/365,” “Actual/365 (Fixed),” “Act/365 (Fixed),” “A/365 (Fixed)” or “A/365F,” the Day Count Fraction will equal the actual number of days in that Interest Period *divided* by 365;
- if the relevant terms supplement specifies that the Day Count Convention is “Actual/360,” “Act/360” or “A/360,” the Day Count Fraction will equal the actual number of days in that Interest Period divided by 360; and
- if the relevant terms supplement specifies that the Day Count Convention is “30/360,” “360/360” or “Bond Basis,” the Day Count Fraction will be calculated as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y2 - Y1)] + [30 \times (M2 - M1)] + (D2 - D1)}{360}$$

*where:*

“Y1” is the year, expressed as a number, in which the first day of the relevant Interest Period falls;

“Y2” is the year, expressed as a number, in which the day immediately following the last day included in the relevant Interest Period falls;

“M1” is the calendar month, expressed as a number, in which the first day of the relevant Interest Period falls;

“M2” is the calendar month, expressed as number, in which the day immediately following the last day included in the relevant Interest Period falls;

“D1” is the first calendar day, expressed as a number, of the relevant Interest Period, unless that number would be 31, in which case D1 will be 30; and

“D2” is the calendar day, expressed as a number, immediately following the last day included in the relevant Interest Period, unless that number would be 31 and D1 is greater than 29, in which case D2 will be 30.

### ***Business Day and Interest Accrual Conventions***

Each Payment Date will be subject to a “**Business Day Convention**” specified in the relevant terms supplement as “Following,” “Modified Following” or “Preceding.” If any scheduled Payment Date is not a business day, then that Payment Date will be adjusted as follows:

- if the relevant terms supplement specifies that the Business Day Convention is “Following,” then that Payment Date will be the first following day that is a business day;
- if the relevant terms supplement specifies that the Business Day Convention is “Modified Following,” then that Payment Date will be the first following day that is a business day unless that day falls in the next calendar month, in which case that date will be the first preceding day that is a business day; and



- if the relevant terms supplement specifies that the Business Day Convention is “Preceding,” then that Payment Date will be the first preceding day that is a business day.

Any interest payment on the notes will be subject to an “**Interest Accrual Convention**” that will be specified in the relevant terms supplement as “Adjusted” or “Unadjusted.” If any scheduled Payment Date is adjusted as a result of the Business Day Convention:

- if the relevant terms supplement specifies that the Interest Accrual Convention is “Unadjusted,” then the amount of interest payable on that Payment Date will not change as a result of that Payment Date being adjusted; and
- if the relevant terms supplement specifies that the Interest Accrual Convention is “Adjusted,” then the amount of interest payable on that Payment Date will be adjusted to reflect the amount of interest accrued during the applicable Interest Period based on the number of days in such Interest Period, as adjusted.

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.

### ***Payment upon Early Redemption***

The relevant terms supplement may specify that the notes will be subject to early redemption. **No further payments will be made on the notes after they have been redeemed early.**

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. Unless otherwise specified in the relevant terms supplement, any payment upon optional redemption, including interest and principal, is subject to the Business Day Convention and the Interest Accrual Convention described under “Business Day and Interest Accrual Conventions” above. 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.

### ***Payment at Maturity***

The relevant terms supplement will specify the manner in which any payment at maturity will be determined and may be linked to the performance of one or more Base Rates, an Index or the least performing of two or more Indices. Notes linked to the least performing of two or more Indices are referred to in this product supplement as “**Least Performing Index Notes**.” Any payment at maturity, including interest and principal, is subject to the Business Day Convention and the Interest Accrual Convention described under “— Business Day and Interest Accrual Conventions” above. **You may lose some or all of your principal amount at maturity.**

### ***Terms Relating to Valuation of the Underlying(s)***

If applicable, 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 supplement will also specify the manner in which these 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.

***Observation Dates.*** The relevant terms supplement will specify, if applicable, each date on which the value of any Underlying is to be referenced in the determination of the payment at maturity on the notes (each, an “**Observation Date**”). Unless otherwise specified in the relevant terms supplement, for notes with a payment at maturity linked to one or more Indices, each Observation Date is subject to postponement as described under “General Terms of Notes — Postponement of an Observation Date with a Payment at Maturity Linked to One or More Indices.”

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 an Observation Date for Notes with a Payment at Maturity Linked to One or More Indices” and “The Underlyings” below for additional information.

## **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 reflects the higher issuance, operational and liability management costs of the notes in comparison to those costs for the conventional fixed-rate debt of JPMorgan Chase & Co. 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-rate debt" 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 and structuring fees, if any, paid to JPMS and 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 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 Index or any of the securities underlying any Index or any other instruments linked to an Underlying. 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 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 relevant terms supplement may specify that you may lose some of your principal amount at maturity. Even if the relevant pricing supplement provides for payment of at least your principal amount at maturity (subject to the credit risks of the Issuer and the Guarantor (if applicable)), you may receive no return on your investment at maturity or the return on your investment at maturity may be less than the amount that would be paid on a conventional debt security of comparable maturity. Under these circumstances, you will not be compensated or fully compensated for any loss in value due to inflation and other factors relating to the value of money over time.

**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 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, you will be exposed to reinvestment risk.**

The term of the notes may be limited by any optional redemption feature set forth in the relevant terms supplement. No further payments will be made on the notes after they have been redeemed early. If the notes are redeemed early, 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.

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

If the notes include an optional redemption feature, the notes may be redeemed early 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 determined in the manner set forth in the relevant terms supplement may be substantially less than the market value of the notes.

**If the notes are redeemed early, the aggregate amount of interest paid to you will be less than the aggregate amount of interest payable over the term of the notes if held to maturity.**

If the notes include an optional redemption feature and the Issuer redeems the notes early, the aggregate amount of interest payable to you will be less than the aggregate amount of interest payable over the term of the notes if held to maturity. The Issuer may choose to redeem the notes early or choose not to redeem the notes early, in its sole discretion. The Issuer may choose to redeem the notes early, for example, if the prevailing interest rate has declined, resulting in an amount of interest payable on the notes greater than that for instruments of a comparable maturity.

**If applicable, the values of the Underlying(s) will be referenced only on the Determination Date(s) and, if applicable, the Observation Date(s) for purposes of determining any payment on the notes.**

If applicable, 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 interest payment on the notes and, if



applicable, the Observation Date(s) on which the value of any Underlying is to be referenced in the determination of the payment at maturity 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 and Observation Date(s), as applicable.

For example, for notes that provide periodic interest payments based on one Base Rate on the relevant Determination Dates, if the values of that Base Rate on the Determination Dates are lower than on other dates during the term of the notes, the interest payments may be significantly less than if they were determined on dates other than the Determination Dates. Under these circumstances, you may receive a lower return on the notes than you would have received if you had invested in other interest-bearing instruments or if you had invested directly in, if applicable, any Index or the securities underlying any Index or any exchange-traded or over-the-counter instruments based on any of the foregoing.

Similarly, for example, for notes with a payment at maturity based on the performance of an Index, as measured from the pricing date to a single Observation Date near the end of the term of the notes, if the value of that Index increases or remains relatively constant during the initial term of the notes and then decreases below the initial value of that Index, the final value of that Index may be significantly less than if it were calculated on a date earlier than the Observation 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 Index, the securities underlying any Index 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.

**Floating rate notes present different investment considerations than fixed rate notes or similar floating rate securities.**

For floating rate notes, the rate of interest paid by the Issuer on the notes for each Interest Period is not fixed, but will be a floating rate determined by reference to an interest rate formula as specified in the

relevant terms supplement. The Interest Rate may reflect a Base Rate or the spread between Base Rates, may be adjusted by a positive or negative spread or by a spread multiplier and may be subject to a minimum or maximum rate. In addition, the relevant terms supplement may specify that an accrual provision applies to the Interest Rate, in which case interest will accrue on a given day during the relevant Interest Period only if each condition specified in the relevant terms supplement has been satisfied. Consequently, the return on the notes may be less than returns otherwise payable on debt securities issued by the Issuer with similar maturities. The variable interest rate on the notes, while determined, in part, by reference to one or more of the applicable Base Rates, may not actually pay at such rates. You should consider, among other things, the overall annual percentage rate of interest to maturity as compared to other equivalent investment alternatives. The Issuer has no control over any fluctuations in the applicable Base Rate.

**The Interest Rate on the notes for any Interest Period will be limited by a maximum rate, if applicable.**

If the relevant terms supplement specifies a maximum rate, the Interest Rate for any Interest Period will be limited by the maximum rate. The maximum rate will limit the amount of interest you may receive for each such Interest Period, even if the fixed or floating rate component, as adjusted by any spread or spread multiplier, if applicable, would have otherwise resulted in an Interest Rate greater than the maximum rate. As a result, if the Interest Rate for any Interest Period without taking into consideration the maximum rate would have been greater than the maximum rate, the notes will provide you less interest income than an investment in a similar instrument that is not subject to a maximum interest rate.

**For floating rate notes or notes with an accrual provision, the Interest Rate for an Interest Period may be equal to zero.**

For floating rate notes, if the applicable Base Rate declines to zero or becomes negative on the applicable Determination Date, the Interest Rate for the applicable Interest Period will be zero (or the minimum rate, if applicable).

In addition if an accrual provision applies to the Interest Rate, interest will accrue on a given day during the relevant Interest Period only if each condition specified in the relevant terms supplement has been satisfied. If the applicable accrual provision is not satisfied for an entire Interest Period (other than an Interest Period(s) to which a fixed rate applies, if applicable), the Interest Rate for that Interest Period will be zero (or the minimum rate, if applicable).

In either case, you will not be compensated for any loss in value due to inflation and other factors relating to the value of money over time during such period.

**If the relevant terms supplement specifies that the notes will be offered for resale at varying prices, the price you pay for the notes may be higher than the prices paid by other investors.**

If the relevant terms supplement specifies that the notes will be offered for resale at varying prices, each agent proposes to offer the notes from time to time for sale to investors in one or more negotiated transactions, or otherwise, at market prices prevailing at the time of sale, at prices related to then-prevailing prices, at negotiated prices, or otherwise. Accordingly, there is a risk that the price you pay for the notes will be higher than the prices paid by other investors based on the date and time you make your purchase, from whom you purchase the notes (e.g., directly from an agent or through a broker or dealer), any related transaction cost (e.g., any brokerage commission), whether you hold your notes in a brokerage account, a fiduciary or fee-based account or another type of account and other market factors beyond the Issuer's control.

**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 directly in any Index or any of the securities underlying any Index or any other instruments linked to any Underlying. Accordingly, changes in the value of an Underlying may not result in a proportionate change in the market value of the notes. For example, if the value of an 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.

**For notes linked in whole or in part to a Non-U.S. Index, if a change-in-law event occurs, the timing and amount of any payment on the notes could be affected.**

For notes linked in whole or in part to a Non-U.S. Index, upon the announcement or occurrence of legal or regulatory changes that the calculation agent determines are likely to interfere with the ability of the Issuer or holders of the notes to transact in or hold the notes, the ability of the Issuer to perform its obligations under the notes or the ability of the Issuer or any entity acting on its behalf to enter into or maintain hedge positions it deems necessary to hedge the Issuer's obligations under the notes, the Issuer may, in its sole and absolute discretion, adjust the timing and amount of any payment on the notes as described below. If a change-in-law event occurs, the value of the notes and any payment on the notes may be adversely affected. See "General Terms of Notes — Consequences of a Change-in-Law Event" and "— Risks Relating to an Index — Governmental legislative and regulatory actions, including sanctions, could adversely affect your investment in the notes and, for notes linked to a Non-U.S. Index, could affect the timing and amount of any payment on the notes" below.

*For notes that are linked in whole or in part to a Non-U.S. Index and that provide for a payment at maturity for each note of the Principal Amount (or the Principal Amount reduced by a percentage specified in the relevant terms supplement)*

If a change-in-law event occurs, the Issuer will have the right, but not the obligation, to cease making further interest payments (if applicable) and to adjust your payment at maturity based on determinations made by the calculation agent. If a change-in-law event occurs and the Issuer chooses to exercise this right, for each note, the Issuer will pay you at maturity, instead of the amount set forth in the relevant terms supplement, an amount determined as described under "General Terms of Notes — Consequences of a Change-in-Law Event — Adjustment of Payments on the Notes."

Under these circumstances, this amount will be payable only at maturity and will not reflect any appreciation or depreciation of the Underlying(s) after the date on which the calculation agent determines that a change-in-law event has occurred, which is referred to in this product supplement as a change-in-law date. You will not receive further interest payments, if applicable, or any other amounts (related to the Option Value or otherwise) until maturity. If a change-in-law event ceases to exist, the amounts determined on the change-in-law date will not be subsequently revised. See "General Terms of Notes — Consequences of a Change-in-Law Event — Adjustment of Payments on the Notes."

*For notes that are linked in whole or in part to a Non-U.S. Index and that do not provide for a payment at maturity for each note of the Principal Amount (or the Principal Amount reduced by a percentage specified in the relevant terms supplement)*

If a change-in-law event occurs, 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 change-in-law 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 Change-in-Law Event — Acceleration of the Notes."

**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.

**The tax consequences of an investment in certain of the notes are unclear.**

There is no direct legal authority as to the proper U.S. federal income tax treatment of certain of the notes, and the Issuer does not intend to request a ruling from the Internal Revenue Service (the “IRS”) regarding those notes. The IRS might not accept, and a court might not uphold, the Issuer’s treatment of certain of the notes, in which case the timing and/or character of income on those 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 or Observation 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 or the securities underlying any Index.**

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 or the securities underlying any Index 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 Underlyings, the securities underlying the Indices or related currency exchange rates or instruments the value of which is derived from one or more Underlyings, the securities underlying one or more Indices 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 or Observation 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 companies the securities of which are included in an 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 Indices or the securities underlying one or more Indices 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 or the securities underlying an Index. 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 Underlyings, the securities underlying one or more Indices 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 and 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-rate debt.**

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-rate debt. The discount is based on, among other things, the Issuer's and its affiliates' internal 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 JPMorgan Chase & Co.'s conventional fixed-rate debt. If the interest rate implied by JPMorgan Chase & Co.'s conventional fixed-rate 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-rate credit spreads. Consequently, the use of an internal funding rate would 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 selling commissions and structuring fees, if any, and (b) may exclude 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 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 the equity securities underlying an Index (while not paid to holders of the notes, dividend payments on any equity securities underlying an Index 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);
- interest and yield rates in the market generally, as well as in the markets of the securities underlying an Index;
- economic, financial, political, regulatory and judicial events that affect the securities underlying an Index or stock 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 the equity securities underlying a Non-U.S. Index are traded, and, if a Non-U.S. Index is calculated in one currency and the equity securities underlying that Non-U.S. Index are traded in one or more other currencies, the correlation between those rates and the value of that Non-U.S. Index.

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 Least Performing Index Notes**

#### **You are exposed to the risks associated with each Index.**

The return at maturity on Least Performing Index Notes is contingent upon the individual performance of each Index and not the performance of a basket of the Indices. 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 Indices. The performance of the Indices may not be correlated, and the performance of any one of the Indices over the term of the notes may negatively affect the payment at maturity on the notes and will not be offset by the performance of any or all of the other Indices. Accordingly, your investment is subject to the risks associated with each Index.

#### **The payment at maturity on the notes may be determined by reference to the performance of the Index that will result in the worst performance of the notes.**

The payment at maturity on the notes may be determined by reference to the performance of the Index that will result in the worst performance of the notes, and you will not benefit from the performance

of any other Index. Accordingly, the performance of a single Index can adversely affect the value of the notes and the payment at maturity on the notes, regardless of the performance of any other Index.

### **Risks Relating to a Base Rate**

#### **A Base Rate will be affected by a number of factors and may be volatile.**

A number of factors can affect the levels of a Base Rate, including, but not limited to:

- general U.S. and global economic conditions;
- sentiment regarding underlying strength in the U.S. and global economies;
- inflation and expectations concerning inflation;
- sentiment regarding credit quality in the U.S. and global credit markets;
- central bank policy regarding interest rates; and
- performance of capital markets.

These and other factors may have an impact on the performance of a Base Rate. Additionally, these factors may result in volatility in the Base Rate, and volatility in the Base Rate may adversely affect your return on the notes.

#### **A Base Rate and the manner in which it is calculated may change in the future.**

There can be no assurance that the method by which any Base Rate is calculated will not change. Such changes in the method of calculation could reduce or increase the level of the relevant Base Rate.

#### **The Secured Overnight Financing Rate (“SOFR”) has a limited history and its future performance cannot be predicted based on historical performance.**

The publication of SOFR began in April 2018, and, therefore, it has a limited history. In addition, the future performance of SOFR cannot be predicted based on the limited historical performance. The level of SOFR during the term of notes linked to Compounded SOFR (as defined under “The Underlyings — Base Rates — Compounded SOFR” in this product supplement) may bear little or no relation to the historical actual or historical indicative SOFR data. Prior observed patterns, if any, in the behavior of market variables and their relation to SOFR, such as correlations, may change in the future. While some pre-publication historical data has been released by the Federal Reserve Bank of New York (the “**New York Fed**”), production of such historical indicative SOFR data inherently involves assumptions, estimates and approximations. No future performance of SOFR may be inferred from any of the historical actual or historical indicative SOFR data. Hypothetical or historical performance data are not indicative of, and have no bearing on, the potential performance of SOFR. Changes in the levels of SOFR will affect Compounded SOFR and, therefore, the return on notes linked to Compounded SOFR and the trading price of those notes, but it is impossible to predict whether such levels will rise or fall. There can be no assurance that SOFR or Compounded SOFR will be positive.

#### **The composition and characteristics of SOFR are not the same as those of LIBOR and there is no guarantee that SOFR (or Compounded SOFR) is a comparable substitute for LIBOR.**

In June 2017, the New York Fed’s Alternative Reference Rates Committee (the “**ARRC**”) announced SOFR as its recommended alternative to U.S. dollar LIBOR. However, the composition and characteristics of SOFR are not the same as those of U.S. dollar LIBOR. SOFR is a broad Treasury repo financing rate that represents overnight secured funding transactions and is not the economic equivalent of U.S. dollar LIBOR. While SOFR is a secured rate, U.S. dollar LIBOR is an unsecured rate. In addition, while SOFR currently is an overnight rate only, U.S. dollar LIBOR is a forward-looking rate that represents interbank funding for a specified term. As a result, there can be no assurance that SOFR will perform in the same way as U.S. dollar LIBOR would have at any time, including, without limitation, as a result of

changes in interest and yield rates in the market, bank credit risk, market volatility or global or regional economic, financial, political, regulatory, judicial or other events. For the same reasons, SOFR is not expected to be a comparable substitute, successor or replacement for U.S. dollar LIBOR. See also “— Any failure of SOFR to gain market acceptance could adversely affect notes linked to Compounded SOFR” below.

**Any failure of SOFR to gain market acceptance could adversely affect notes linked to Compounded SOFR.**

According to the ARRC, SOFR was developed for use in certain U.S. dollar derivatives and other financial contracts as an alternative to U.S. dollar LIBOR in part because it is considered a good representation of general funding conditions in the overnight U.S. Treasury repurchase agreement market. However, as a rate based on transactions secured by U.S. Treasury securities, it does not measure bank-specific credit risk and, as a result, is less likely to correlate with the unsecured short-term funding costs of banks than competing replacement rates for U.S. dollar LIBOR that reflect bank-specific credit risk. This may mean that market participants would not consider SOFR a suitable substitute, replacement or successor for all of the purposes for which U.S. dollar LIBOR historically has been used (including, without limitation, as a representation of the unsecured short-term funding costs of banks), which may, in turn, lessen market acceptance of SOFR. Any failure of SOFR to gain market acceptance could adversely affect the return on and value of the notes linked to Compounded SOFR and the price at which investors can sell those notes in the secondary market.

**The secondary market for notes linked to Compounded SOFR may be limited.**

If SOFR does not prove to be widely used as a benchmark in securities that are similar or comparable to the notes, the trading price of notes linked to Compounded SOFR may be lower than those of debt securities with interest rates based on rates that are more widely used. Similarly, market terms for debt securities with interest rates based on SOFR, including, but not limited to, the spread over the reference rate reflected in the interest rate provisions or manner of compounding the reference rate, may evolve over time, and as a result, trading prices of notes linked to Compounded SOFR may be lower than those of later-issued debt securities that are based on SOFR. Investors in notes linked to Compounded SOFR may not be able to sell their notes at all or may not be able to sell their notes at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

**The administrator of SOFR may make changes that could adversely affect the level of SOFR or discontinue SOFR and has no obligation to consider your interest in doing so.**

SOFR is a relatively new rate, and the New York Fed (or a successor), as administrator of SOFR, may make methodological or other changes that could change the value of SOFR, including changes related to the method by which SOFR is calculated, eligibility criteria applicable to the transactions used to calculate SOFR, or timing related to the publication of SOFR. If the manner in which SOFR is calculated is changed, that change may result in a reduction of the amount of interest payable on notes linked to Compounded SOFR, which may adversely affect the trading prices of those notes. The administrator of SOFR may withdraw, modify, amend, suspend or discontinue the calculation or dissemination of SOFR in its sole discretion and without notice and has no obligation to consider the interests of holders of notes linked to Compounded SOFR in calculating, withdrawing, modifying, amending, suspending or discontinuing SOFR. For purposes of the formula used to calculate interest based on Compounded SOFR with respect to notes linked to Compounded SOFR, Daily SOFR (as defined under “The Underlyings — Base Rates — Compounded SOFR” in this product supplement) in respect of a particular date will not be adjusted for any modifications or amendments to SOFR data that the administrator of SOFR may publish after the Interest Rate for the applicable Interest Period has been determined.

**Compounded SOFR may be replaced by a successor or substitute interest rate.**

If the calculation agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR, then a Benchmark Replacement

will be selected by the calculation agent in accordance with the benchmark transition provisions applicable to notes linked to Compounded SOFR described under “The Underlyings — Base Rates — Compounded SOFR — Effect of a Benchmark Transition Event” in this product supplement. The selection of a Benchmark Replacement, and any decisions, determinations or elections made by the calculation agent or by the Issuer in connection with implementing a Benchmark Replacement with respect to notes linked to Compounded SOFR in accordance with the benchmark transition provisions, could result in adverse consequences to the applicable Interest Rate on the applicable Determination Date or the value of the Compounded SOFR used on the applicable Observation Date, if any, which could adversely affect the return on, value of and market for, the notes. Further, there is no assurance that the characteristics of any Benchmark Replacement will be similar to Compounded SOFR, or that any Benchmark Replacement will produce the economic equivalent of Compounded SOFR.

JPMS, an affiliate of the Issuer and the Guarantor (if applicable), is currently the calculation agent for the notes. In the future, the Issuer may appoint another firm, itself or another of its affiliates as the calculation agent. If the calculation agent fails to make any determination, decision or election that it is required to make pursuant to the benchmark transition provisions described above, then the Issuer will make that determination, decision or election.

See “The Underlyings — Base Rates — Compounded SOFR — Effect of a Benchmark Transition Event” in this product supplement for the definitions of terms relating to the benchmark transition provisions.

**Uncertainty as to some of the Benchmark Replacements and any Benchmark Replacement the Issuer makes may adversely affect the return on and the market value of notes linked to Compounded SOFR.**

Under the benchmark transition provisions of applicable to notes linked to Compounded SOFR, if the calculation agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR, then a Benchmark Replacement will be selected by the calculation agent. If a particular Benchmark Replacement or Benchmark Replacement Adjustment cannot be determined, then the next-available Benchmark Replacement or Benchmark Replacement Adjustment will apply. These replacement rates and adjustments may be selected or formulated by (i) the Relevant Governmental Body (such as the ARRC), (ii) the International Swaps and Derivatives Association (“ISDA”) or (iii) in certain circumstances, the Issuer. In addition, the benchmark transition provisions expressly authorize the Issuer to make Benchmark Replacement Conforming Changes with respect to, among other things, the determination of Interest Periods and Observation Periods and the timing and frequency of determining rates and making payments of interest. The application of a Benchmark Replacement and Benchmark Replacement Adjustment, and any implementation of Benchmark Replacement Conforming Changes, could result in adverse consequences to the applicable Interest Rate on the applicable Determination Date or the value of the Compounded SOFR used on the applicable Observation Date, if any, which could adversely affect the return on, value of and market for, the notes. Further, there is no assurance that the characteristics of any Benchmark Replacement will be similar to the then-current Benchmark that it is replacing, or that any Benchmark Replacement will produce the economic equivalent of the then-current Benchmark that it is replacing. For more information, including the definitions of terms relating to the benchmark transition provisions, see “The Underlyings — Base Rates — Compounded SOFR — Effect of a Benchmark Transition Event” in this product supplement.

**The U.S. Dollar SOFR ICE Swap Rates have limited histories and future performance cannot be predicted based on historical performance.**

The publication of SOFR began in April 2018, and, therefore, it has a limited history. The future performance of SOFR cannot be predicted based on the limited historical performance. ICE Benchmark Administration Limited (“IBA”) launched the U.S. Dollar SOFR ICE Swap Rates for use as a reference rate for financial instruments in order to aid the market’s transition to SOFR and away from LIBOR. However, the composition and characteristics of SOFR differ from those of LIBOR in material respects, and the historical performance of LIBOR and the U.S. Dollar LIBOR ICE Swap Rate will have no bearing



on the performance of SOFR or the Reference Rate. See the preceding risk factors for additional information.

The publication of the U.S. Dollar SOFR ICE Swap Rates began in November 2021, and, therefore, has a limited history. The future performance of a U.S. Dollar SOFR ICE Swap Rate cannot be predicted based on the limited historical performance. The levels of U.S. Dollar SOFR ICE Swap Rates and SOFR during the term of notes linked to a U.S. Dollar SOFR ICE Swap Rate may bear little or no relation to the historical actual or historical indicative data. Prior observed patterns, if any, in the behavior of market variables and their relation to the U.S. Dollar SOFR ICE Swap Rates and SOFR, such as correlations, may change in the future. While some pre-publication historical data for SOFR has been released by the New York Fed, production of such historical indicative SOFR data inherently involves assumptions, estimates and approximations. No future performance of the U.S. Dollar SOFR ICE Swap Rates or SOFR may be inferred from any of the historical actual or historical indicative SOFR data. Hypothetical or historical performance data are not indicative of, and have no bearing on, the potential performance of U.S. Dollar SOFR ICE Swap Rates or SOFR. Changes in the levels of SOFR will affect the U.S. Dollar SOFR ICE Swap Rates. There can be no assurance that the U.S. Dollar SOFR ICE Swap Rates or SOFR will be positive.

**The U.S. Dollar SOFR ICE Swap Rates are subject to certain risks relating to SOFR.**

Any failure of SOFR to gain market acceptance could adversely affect SOFR and U.S. Dollar SOFR ICE Swap Rates, the return on and value of notes linked to U.S. Dollar SOFR ICE Swap Rates and the price at which investors can sell those notes in the secondary market. See “— Any failure of SOFR to gain market acceptance could adversely affect notes linked to Compounded SOFR” above.

In addition, the administrator of SOFR may make changes that could adversely affect the level of SOFR or discontinue SOFR and has no obligation to consider your interest in doing so. The administrator of SOFR may withdraw, modify, amend, suspend or discontinue the calculation or dissemination of SOFR in its sole discretion and without notice and has no obligation to consider the interests of holders of notes linked to a U.S. Dollar SOFR ICE Swap Rate in calculating, withdrawing, modifying, amending, suspending or discontinuing SOFR. See “— The administrator of SOFR may make changes that could adversely affect the level of SOFR or discontinue SOFR and has no obligation to consider your interest in doing so” above.

**A U.S. Dollar SOFR ICE Swap Rate may be determined by the calculation agent in its sole discretion or, if it is discontinued or ceased to be published permanently or indefinitely, replaced by a successor or substitute rate.**

If no relevant rate appears on the Relevant Bloomberg Screen Page (as defined under “The Underlyings — Base Rates — Compounded SOFR” in this product supplement) on a relevant day at approximately 11:00 a.m., New York City time, then the calculation agent, after consulting such sources as it deems comparable to the foregoing display page, or any such source it deems reasonable from which to estimate the relevant rate for U.S. dollar swaps referencing SOFR, will determine the relevant U.S. Dollar SOFR ICE Swap Rate for that relevant day in its sole discretion.

Notwithstanding the foregoing, if the calculation agent determines in its sole discretion on or prior to the relevant day that the relevant rate for U.S. dollar swaps referencing SOFR has been discontinued or that rate has ceased to be published permanently or indefinitely, then the calculation agent will use as the relevant U.S. Dollar SOFR ICE Swap Rate for that day a substitute or successor rate that it has determined in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, to be a commercially reasonable replacement rate. If the calculation agent has determined a substitute or successor rate in accordance with the foregoing, the calculation agent may determine in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, the definitions of business day, Determination Dates, Business Day Convention, Interest Accrual Convention, Day Count Convention and any other relevant methodology for calculating that substitute or successor rate, including any adjustment factor, spread and/or formula it determines is needed to make that substitute or successor rate



comparable to the relevant rate for U.S. dollar swaps referencing SOFR, in a manner that is consistent with industry-accepted practices for that substitute or successor rate.

Any of the foregoing determinations or actions by the calculation agent could result in adverse consequences to the applicable Interest Rate on the applicable Determination Date or the value of the relevant U.S. Dollar SOFR ICE Swap Rate used on the applicable Observation Date, if any, which could adversely affect the return on, value of and market for, notes linked to a U.S. Dollar SOFR ICE Swap Rate.

**A EUR ICE Swap Rate may be determined by the calculation agent in its sole discretion or, if it is discontinued or ceased to be published permanently or indefinitely, replaced by a successor or substitute rate.**

If no relevant rate appears on the Reuters Screen ICESWAP2 Page under the heading “EURIBOR BASIS-EUR” and above the caption “11:00 AM Frankfurt” on a relevant day at approximately 11:15 a.m., Frankfurt, Germany time, then the calculation agent, after consulting such sources as it deems comparable to the foregoing display page, or any such source it deems reasonable from which to estimate the relevant mid-market annual swap rate for a euro interest rate swap, will determine the EUR ICE Swap Rate for that relevant day in its sole discretion.

Notwithstanding the foregoing, if the calculation agent determines in its sole discretion on or prior to the relevant day that the relevant mid-market annual swap rate for a euro interest rate swap has been discontinued or that rate has ceased to be published permanently or indefinitely, then the calculation agent will use as the EUR ICE Swap Rate for that day a substitute or successor rate that it has determined in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, to be (a) the industry-accepted successor rate to the relevant mid-market annual swap rate for a euro interest rate swap or (b) if no such industry-accepted successor rate exists, the most comparable substitute or successor rate to the relevant mid-market annual swap rate for a euro interest rate swap. If the calculation agent has determined a substitute or successor rate in accordance with the foregoing, the calculation agent may determine in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, the Business Day Convention, the Interest Accrual Convention, the definitions of business day, Day Count Fraction and Determination Date and/or Observation Date and any other relevant methodology for calculating that substitute or successor rate, including any adjustment factor it determines is needed to make that substitute or successor rate comparable to the relevant mid-market annual swap rate for a euro interest rate swap, in a manner that is consistent with industry-accepted practices for that substitute or successor rate.

Any of the foregoing determinations or actions by the calculation agent could result in adverse consequences to the applicable Interest Rate on the applicable Determination Date or the value of the EUR ICE Swap Rate used on the applicable Observation Date, if any, which could adversely affect the return on and the market value of notes linked to a EUR ICE Swap Rate.

**The CPI itself and the way the BLS calculates the CPI may change in the future.**

There can be no assurance that the BLS will not change the method by which it calculates the CPI. In addition, changes in the way the CPI is calculated could reduce the level of the CPI and lower the interest paid with respect to the notes. Accordingly, the amount of interest payable on the notes, and therefore the value of the notes, may be significantly reduced. If the CPI is discontinued or substantially altered, a successor index may be employed to calculate the interest payable on the notes and the payment at maturity on the notes if it is linked to the CPI Rate, as described herein, and that substitution may adversely affect the value of the notes.

**For notes linked to the CPI, the CPI Rate may not reflect the actual levels of inflation affecting holders of the notes.**

The CPI is just one measure of price inflation in the United States and, therefore, may not reflect the actual levels of inflation affecting holders of the notes. Further, the CPI Rate for any relevant period (including an Interest Period) is based on the lagging percentage change in the level of the CPI over a specified period. Accordingly, an investment in the notes should not be expected to fully offset any costs of inflation actually experienced by investors during the term of 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 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 included in an Index may affect that Index, as a newly added security may perform significantly better or worse than the security or securities 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 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 actions that might affect the value of your notes. 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 linked 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 linked 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.

**You will have no ownership rights in any Index or any of the securities underlying any Index.**

Investing in the notes is not equivalent to investing (or taking a short position) directly in any Index or any of the securities underlying any Index 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 Index or on a small number of Indices that are concentrated in a single or a limited number of industry 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 geographical regions.

**Governmental legislative and regulatory actions, including sanctions, could adversely affect your investment in the notes and, for notes linked to a Non-U.S. Index, could affect the timing and amount of any payment on the notes.**

Governmental legislative and regulatory actions, including, without limitation, sanctions-related actions by the U.S. or a foreign government, could prohibit or otherwise restrict persons from holding the notes, or any of the securities underlying any Index, or engaging in transactions in them, and any such action could adversely affect the value of the notes. These legislative and regulatory actions could result in restrictions on the notes. You may lose a significant portion or all of your initial investment in the notes, including if you are forced to divest the notes due to the government mandates, especially if such divestment must be made at a time when the value of the notes has declined.

For notes linked in whole or in part to a Non-U.S. Index, upon the announcement or occurrence of legal or regulatory changes that the calculation agent determines are likely to interfere with the ability of the Issuer or holders of the notes to transact in or hold the notes, the ability of the Issuer to perform its obligations under the notes or the ability of the Issuer or any entity acting on its behalf to enter into or maintain hedge positions that it deems necessary to hedge the Issuer's obligations under the notes, the Issuer may, in its sole and absolute discretion, adjust the timing and amount of any payment on the notes. See "— For notes linked in whole or in part to a Non-U.S. Index, if a change-in-law event occurs, the timing and amount of any payment on the notes could be affected" above.

**For notes with a payment at maturity linked to one or more Indices, market disruptions may adversely affect your return.**

The calculation agent may, in its sole discretion, determine that the equity markets have been affected in a manner that prevents it from determining the value of any Index on any Observation Date and the amount of the payment at maturity on the notes. These events may include disruptions or suspensions of trading in the equity 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 Observation Dates and the Maturity Date will be postponed and that your return will be adversely affected. Market disruption events are defined in the relevant sections of "The Underlyings — Indices — Market Disruption Events" below. In addition, if any Observation Date is postponed to the last possible day and the value of any Index 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 Index on that last possible day. See "General Terms of Notes — Postponement of an Observation Date for Notes with a Payment at Maturity Linked to One or More Indices" and "General Terms of Notes — Postponement of the Maturity Date for Notes with a Payment at Maturity Linked to One or More Indices" for more information.

**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” below.

#### **Risks Relating to a Non-U.S. Index**

**For notes linked in whole or in part to a Non-U.S. Index, 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, any amount payable on the notes will not be adjusted for changes in exchange rates that might affect that Non-U.S. Index.**

Because the prices of the non-U.S. securities underlying the applicable Non-U.S. Index are not converted into U.S. dollars for purposes of calculating the value of that Non-U.S. Index and although the non-U.S. securities underlying that Non-U.S. Index 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, 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 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, 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, 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 are converted into U.S. dollars for the purposes of calculating the value of that Non-U.S. Index, 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 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 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 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, 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, changes in the volatility of exchange rates and the correlation between those rates and the values of that Non-U.S. Index 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 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 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 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 are denominated refers to the size and frequency of changes in that exchange rate.

Because the applicable Non-U.S. Index is calculated, in part, by converting the closing prices of the non-U.S. securities underlying that Non-U.S. Index 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 are denominated and the value of that Non-U.S. Index 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. 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 are denominated and the percentage changes in the value of that Non-U.S. Index 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.

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, 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 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 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. 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 based on its historical performance. The level of a Non-U.S. Index may change in a manner that would adversely affect any payment on the notes.

**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, JPMorgan Chase & Co. will contribute the net proceeds that it receives from the sale of the notes it issues to its “intermediate holding company” subsidiary, JPMorgan Chase Holdings LLC, which will use those net proceeds for general corporate purposes, in connection with hedging JPMorgan Chase & Co.’s obligations under its notes or for any other purpose described in the relevant terms supplement. General corporate purposes may include investments in JPMorgan Chase & Co.’s subsidiaries, payments of dividends to JPMorgan Chase & Co., extensions of credit to JPMorgan Chase & Co. or its subsidiaries or the financing of possible acquisitions or business expansion. Net proceeds may be temporarily invested pending application for their stated purpose. Interest on JPMorgan Chase & Co.’s debt securities and dividends on its equity securities, as well as redemptions or repurchases of its outstanding securities, will be made using amounts it receives as dividends or extensions of credit from JPMorgan Chase Holdings LLC or as dividends from JPMorgan Chase Bank, N.A. 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 and structuring fees, if any, paid to each agent and 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 Underlyings or the securities underlying one or more Indices or related currency exchange rates. To accomplish this, the Issuer, through its affiliates or others, may take positions in one or more instruments the value of which is derived from one or more Underlyings, the securities underlying one or more Indices or related currency exchange rates, or instruments the value of which is derived from one or more Underlyings or the securities underlying one or more Indices 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 Underlyings or the securities underlying one or more Indices 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, any of its affiliates 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 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 the Maturity Date for Notes with a Payment at Maturity Linked to One or More Indices

For notes with a payment at maturity linked to one or more Indices, if, due to a market disruption event or otherwise, any Observation Date referenced in the determination of the payment at maturity on the notes is postponed so that it falls less than two business days prior to that scheduled maturity date, the maturity date will be the second business day following the latest such Observation Date, as postponed, unless otherwise specified in the relevant terms supplement. Notwithstanding the foregoing, for notes with a term of one year or less, the maturity date will not be postponed to a date that is more than one year (including either the issue date or the last possible date that the notes could be outstanding, but not both) after the issue date. If the maturity date is postponed as described above, any payment of interest due on the maturity date will be made on the maturity date as postponed, with the same force and effect as if the maturity date had not been postponed, but no additional interest will accrue or be payable as a result of the delayed payment, even if the relevant terms supplement specifies that the Interest Accrual Convention is "Adjusted."

### Postponement of an Observation Date for Notes with a Payment at Maturity Linked to One or More Indices

For notes with a payment at maturity linked to one or more Indices, 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 Index***

***Notes Linked to a Single Index.*** For notes with a payment at maturity linked to a single Index, if an Observation Date is a Disrupted Day (as defined below), the applicable Observation 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 Observation Date be postponed to a date that is after the applicable Final Disrupted Observation Date (as defined below). If an Observation Date has been postponed to the applicable Final Disrupted Observation Date and that day is a Disrupted Day, the calculation agent will determine the closing level of the relevant Index for that Observation Date on that Final Disrupted Observation Date 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 Observation Date of each security most recently constituting that Index, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement.

For purposes of this “— Notes Linked to a Single Index” section, with respect to an Observation Date, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the “**Final Disrupted Observation Date**” means the tenth scheduled trading day after that Observation Date, as originally scheduled, *provided* that, for notes with a maturity of one year or less, the applicable Final Disrupted Observation Date will be the earlier of:

- (a) the tenth scheduled trading day after that Observation Date, as originally scheduled; and
- (b) the last date that could serve as the final Observation Date without causing the maturity date to be more than one year (including either the issue date or the last possible date that the notes could be outstanding, but not both) after the issue date.

#### **Notes Linked to Multiple Indices**

For notes with a payment at maturity linked to multiple Indices, if an Observation Date is a Disrupted Day for any Index (any Index affected by a Disrupted Day, a “**Disrupted Index**”), the applicable Observation Date will be postponed to the earliest day on which the closing level of each Index has been established, as described below:

- (a) for each Index that is not a Disrupted Index (an “**Unaffected Index**”), the closing level on the postponed Observation Date will be deemed to be the closing level on the originally scheduled Observation Date; and
- (b) for each Disrupted Index, the closing level on the postponed Observation Date will be deemed to be the closing level on the first scheduled trading day immediately following the originally scheduled Observation Date that is not a Disrupted Day for that Disrupted Index.

Accordingly, if an Observation Date is postponed as described above, the calculation agent may reference the closing levels of the Indices from different days when making any determinations with respect to that Observation Date, as postponed.

For example, assume that the payment at maturity is linked to three Indices, Index A, Index B and Index C, and that:

- (a) Scheduled Trading Day 1, a scheduled Observation Date, is not a Disrupted Day for Index A, but is a Disrupted Day for Indices B and C;
- (b) Scheduled Trading Day 2 is not a Disrupted Day for Index B, but is a Disrupted Day for Index C; and
- (c) Scheduled Trading Day 3 is not a Disrupted Day for Index C.

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

In no event, however, will any Observation Date be postponed to a date that is after the applicable Final Disrupted Observation Date. If an Observation Date has been postponed to the applicable Final Disrupted Observation Date and, on that day, the closing level for any Disrupted Index has not been established in accordance with the first paragraph of this “— Notes Linked to Multiple Indices” section (a **“Final Disrupted Index”**), the closing level for that Observation Date will be determined by the calculation agent on that Final Disrupted Observation Date and will be deemed to be:

- (a) for each Unaffected Index, the closing level on the originally scheduled Observation Date;
- (b) for each Disrupted Index that is not a Final Disrupted Index, the closing level determined in the manner described in the first paragraph of this “— Notes Linked to Multiple Indices” section; and
- (c) for each Final Disrupted 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 Observation Date of each security most recently constituting that Index, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement.

For purposes of this “— Notes Linked to Multiple Indices” section, with respect to an Observation Date, unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, the **“Final Disrupted Observation Date”** means the tenth scheduled trading day after that Observation Date, as originally scheduled, for each of the Indices (or, if that tenth scheduled trading day is not the same day for each of the Indices, the latest of those tenth scheduled trading days, *provided* that, for notes with a maturity of one year or less, the applicable Final Disrupted Observation Date will be the earlier of:

- (a) the tenth scheduled trading day after that Observation Date, as originally scheduled, for each of the Indices (or, if that tenth scheduled trading day is not the same day for each of the Indices, the latest of those tenth scheduled trading days); and
- (b) the last date that could serve as the final Observation Date without causing the maturity date to be more than one year (including either the issue date or the last possible date that the notes could be outstanding, but not both) after the issue date.

### ***Additional Defined Terms***

Unless otherwise specified in the relevant terms supplement, a **“Disrupted Day”** means with respect to an Index, a day that is not a trading day with respect to that Index or a day on which a market disruption event occurs or is continuing with respect to that Index.

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, with respect to an 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.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, a **“trading day”** is, with respect to an 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.

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, “**relevant exchange**” means, 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.

### **Consequences of a Change-in-Law Event**

Unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, for notes linked in whole or in part to a Non-U.S. Index, if a change-in-law event occurs, the Issuer will have the right, but not the obligation, to adjust the timing and amount of any payment on the notes as described below.

A “**change-in-law event**,” unless otherwise specified in the relevant terms supplement or any accompanying underlying supplement, means that:

- (a) due to (i) the announcement, adoption of, or any change in, any applicable law, regulation, rule, sanction, directive or order (including, without limitation, relating to any tax law or any financial sanction or embargo program); or (ii) the promulgation of, any change in, or public announcement of, the formal or informal 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 any action taken by a taxing or sanctioning authority), in each case occurring on or after the pricing date, the calculation agent determines in good faith that it is likely to be contrary (or upon adoption, it is likely to be contrary) to that law, rule, regulation, order, decision or determination (1) for the Issuer or the holders of the notes to purchase, sell, enter into, maintain, hold, acquire or dispose of the notes or any underlying component to which the notes are linked, (2) for the Issuer to perform its obligations under the terms of the notes or (3) for any Hedging Entity to purchase, sell, enter into, maintain, hold, acquire or dispose of its or its affiliates’ hedge positions; or
- (b) for any reason set forth in (a) above, any Hedging Entity is unable, after using commercially reasonable efforts, to (i) acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transaction(s) or asset(s) that the Hedging Entity deems necessary to hedge the risk (including, but not limited to, stock price and volatility risk) of entering into and performing the Issuer’s obligations with respect to the notes, or (ii) realize, recover or remit the proceeds of any of those transaction(s) or asset(s).

“**Hedging Entity**” means the Issuer or any affiliate(s) of the Issuer or any entity (or entities) acting on behalf of the Issuer engaged in any hedging transactions relating to the notes or any Underlying to which the notes are linked in respect of the Issuer’s obligations under the notes.

“**Hedge positions**” means one or more (A) positions or contracts in securities, options, futures, derivatives or foreign exchange, (B) stock loan transactions or (C) other instruments or arrangements, in each case, in order to hedge the Issuer’s obligations under the notes (in the aggregate on a portfolio basis or incrementally on a trade by trade basis).

Please see “Risk Factors — Risks Relating to an Index — Governmental legislative and regulatory actions, including sanctions, could adversely affect your investment in the notes and, for notes linked to a Non-U.S. Index, could affect the timing and amount of any payment on the notes” for more information.

### ***Adjustment of Payments on the Notes***

Unless otherwise specified in the relevant terms supplement, this “Adjustment of Payments on the Notes” subsection will apply to notes linked in whole or in part to a Non-U.S. Index for which the payment at maturity, for each note, is equal to no less than the Principal Amount (or the Principal Amount reduced by a percentage specified in the relevant terms supplement). The relevant terms supplement may specify that the notes will or may pay an additional amount at maturity based on the performance of the



Underlying(s) (the “**Additional Amount**”) and may specify that the Additional Amount will not be less than a specified amount (the “**Minimum Amount**”). The relevant terms supplement may also specify that the notes will or may pay interest based on the performance of the Underlying(s).

If this subsection applies and a change-in-law event occurs, the Issuer will have the right, but not the obligation, to cease making further interest payments (if applicable) and to adjust your payment at maturity based on determinations made by the calculation agent as described below. If a change-in-law event occurs and the Issuer chooses to exercise this right, (a) the Issuer will cease making further interest payments (if applicable) and the only remaining payment per note will be due and payable only at maturity and (b) for each note, the Issuer will pay you at maturity, instead of the amounts set forth in the relevant terms supplement, an amount equal to:

- (i) the Option Value; *plus*
- (ii) the Principal Amount or, if the embedded fixed-income debt component represents a value at maturity of less than the Principal Amount, the value of the embedded fixed-income debt component at maturity, as determined by the calculation agent in good faith and in a commercially reasonable manner.

Notwithstanding the foregoing, in no event will that amount be less than the smallest amount that could be payable at maturity under the terms of the notes if no commodity hedging disruption event had occurred.

For purposes of this “Adjustment of Payments on the Notes” subsection, the “**Option Value**” will be determined by the calculation agent in good faith and in a commercially reasonable manner and will be a fixed amount representing the price of the embedded option representing the Additional Amount (if applicable) payable on the notes at maturity, as of the date on which the calculation agent determines that a change-in-law event has occurred (a “**change-in-law date**”), and the price of the embedded option representing each of the remaining interest payments (if applicable) from but excluding the change-in-law date through and including the maturity date, as of the change-in-law date, *provided* that the Option Value may not be less than zero (or, if applicable, the Minimum Amount).

If a change-in-law event occurs and the Issuer decides to exercise this right, the Issuer will provide, or cause the calculation agent to provide, written notice of its election to exercise this right to the trustee at its New York office and to DTC, as holder of the notes. The Issuer, or the calculation agent, will deliver this notice as promptly as possible and in no event later than the fifth business day immediately following the change-in-law date. Additionally, the Issuer will specify in the notice the Option Value as determined on the change-in-law date.

### ***Acceleration of the Notes***

Unless otherwise specified in the relevant terms supplement, this “Acceleration of the Notes” subsection will apply to notes linked in whole or in part to a Non-U.S. Index to which the “— Adjustment of Payments on the Notes” subsection above does not apply. If this subsection applies and a change-in-law event occurs, the Issuer will have the right, but not the obligation, to accelerate the payment on the notes. If a change-in-law 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 at its New York office, on which notice the trustee may conclusively rely, 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.

## **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, 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, for notes with a payment at maturity linked to one or more Indices, calculated as if the date of acceleration were (a) the final Observation Date and (b) the Final Disrupted Observation Date for the final Observation 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 immediately preceding paragraph will include any accrued and unpaid interest on the notes, calculated as if the date of acceleration were the final day of the applicable Interest Period and based on the Interest Rate applicable to that Interest Period.

For notes with a payment at maturity linked to one or more Indices, if the final value of an Index is determined on more than one Observation Date, then, for each Observation 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 Observation Dates in excess of one) will be the corresponding Observation 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 depository 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

### Base Rates

The relevant terms supplement will specify the applicable maturity, if applicable, to be used to determine the applicable Base Rate, which, in each instance, is referred to in this product supplement as the “**Designated Maturity**.” For example, the relevant terms supplement may specify that the applicable U.S. Dollar SOFR ICE Swap Rates will be the 30-Year U.S. Dollar SOFR ICE Swap Rate and the 10-Year U.S. Dollar SOFR ICE Swap Rate, or that the applicable EUR ICE Swap Rates will be the 10-Year EUR ICE Swap Rate and the 2-Year EUR ICE Swap Rate, or that the applicable LIBOR Rate will be the 3-month LIBOR Rate.

### Compounded SOFR

SOFR is published by the New York Fed and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities. The New York Fed reports that SOFR includes all trades in the Broad General Collateral Rate, plus bilateral Treasury repurchase agreement (“**repo**”) transactions cleared through the delivery-versus-payment service offered by the Fixed Income Clearing Corporation (the “**FICC**”), a subsidiary of The Depository Trust & Clearing Corporation (“**DTCC**”). SOFR is filtered by the New York Fed to remove a portion of the foregoing transactions considered to be “specials.” According to the New York Fed, “**specials**” are repos for specific-issue collateral which take place at cash-lending rates below those for general collateral repos because cash providers are willing to accept a lesser return on their cash in order to obtain a particular security.

The New York Fed reports that SOFR is calculated as a volume-weighted median of transaction-level tri-party repo data collected from The Bank of New York Mellon, which currently acts as the clearing bank for the tri-party repo market, as well as General Collateral Finance Repo transaction data and data on bilateral Treasury repo transactions cleared through the FICC’s delivery-versus-payment service. The New York Fed notes that it obtains information from DTCC Solutions LLC, an affiliate of DTCC.

The New York Fed currently publishes SOFR daily on its website. The New York Fed states on its publication page for SOFR that use of SOFR is subject to important disclaimers, limitations and indemnification obligations, including that the New York Fed may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. Information contained in the publication page for SOFR is not incorporated by reference in, and should not be considered part of, this product supplement.

With respect to the Observation Period corresponding to any Interest Period, “**Compounded SOFR**” will be a compounded average of daily SOFR over that Observation Period, calculated as follows:

$$\left[ \prod_{i=1}^{d_0} \left( 1 + \frac{SOFR_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

where:

- “ $d_0$ ” means the number of U.S. Government Securities Business Days in that Observation Period;
- “ $i$ ” is a series of whole numbers from one to  $d_0$ , each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in that Observation Period;
- “ $SOFR_i$ ” means, for any U.S. Government Securities Business Day “ $i$ ” in that Observation Period, Daily SOFR with respect to that day;
- “ $n_i$ ” means, for any U.S. Government Securities Business Day “ $i$ ” in that Observation Period, the number of calendar days from, and including, that U.S. Government Securities Business Day “ $i$ ” up to, but excluding, the following U.S. Government Securities Business Day (“ $i+1$ ”); and

- “*d*” means the number of calendar days in that Observation Period.

Unless otherwise specified in the relevant terms supplement, “**Daily SOFR**” means, with respect to any U.S. Government Securities Business Day prior to a Benchmark Replacement Date:

- the Secured Overnight Financing Rate published for such U.S. Government Securities Business Day as such rate appears on the SOFR Administrator's Website at 3:00 p.m. (New York City time) on the immediately following U.S. Government Securities Business Day; or
- if such rate does not so appear, the Secured Overnight Financing Rate as published in respect of the first preceding U.S. Government Securities Business Day for which the Secured Overnight Financing Rate was published on the SOFR Administrator's Website.

Notwithstanding the foregoing, if the calculation agent determines on or prior to the relevant day that a Benchmark Transition Event and its related Benchmark Replacement Date (each as defined in “— Effect of a Benchmark Transition Event” below) have occurred with respect to Compounded SOFR, then the provisions set forth below under “— Effect of a Benchmark Transition Event” below (the “**benchmark transition provisions**”) will thereafter apply to all determinations of the rate of interest payable on the notes during any Interest Period with Compounded SOFR as the Base Rate (after any Initial Interest Periods) and, if the payment at maturity on the notes is linked to Compounded SOFR, to all determinations of the payment at maturity. In accordance with the benchmark transition provisions, after a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, the amount of interest that will be payable for the applicable Interest Period (after any Initial Interest Periods) on the notes will be an annual rate equal to the sum of the Benchmark Replacement (as defined below) and any spread (which may be positive or negative) applied to the Benchmark Rate as specified in the applicable terms supplement. In addition, if the payment at maturity on the notes is linked to Compounded SOFR, any determination that would have been made by reference to Compounded SOFR for this purpose will be made by reference to an annual rate equal to the sum of the Benchmark Replacement and any spread (which may be positive or negative) applied to the Benchmark Rate as specified in the applicable terms supplement.

“**Observation Period**” means, with respect to each Interest Period, the period from, and including, the second U.S. Government Securities Business Day immediately preceding the first day in that Interest Period to, but excluding, the second U.S. Government Securities Business Day immediately preceding the interest payment date for that Interest Period, *provided* that if any Interest Period is adjusted due to the postponement of an interest payment date, the corresponding Observation Period will not be adjusted and will be determined based on that Interest Period prior to its adjustment.

“**U.S. Government Securities Business Day**” means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

“**SOFR Administrator**” means the Federal Reserve Bank of New York (or a successor administrator of the Secured Overnight Financing Rate).

“**SOFR Administrator's Website**” means the website of the Federal Reserve Bank of New York, or any successor source. Information contained in the SOFR Administrator Website is not incorporated by reference in, and should not be considered part of, this product supplement.

All calculations of the calculation agent, in the absence of manifest error, will be conclusive for all purposes and binding on the Issuer and holders of the notes.

JPMS, an affiliate of the Issuer, is currently the calculation agent for the notes. In the future, the Issuer may appoint another firm, itself or another of its affiliates as the calculation agent.

### *Effect of a Benchmark Transition Event*

**Benchmark Replacement.** If the calculation agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred at or prior to the (as defined below) in respect of any determination of the Benchmark Rate on any date, the Benchmark Replacement will replace the then-current Benchmark Rate for all purposes relating to the notes during the applicable Interest Period (after any Initial Interest Periods) in respect of such determination on such date and all determinations on all subsequent dates (including, if applicable, for purposes of the determination of the payment at maturity).

**Benchmark Replacement Conforming Changes.** In connection with the implementation of a Benchmark Replacement, the Issuer will have the right to make Benchmark Replacement Conforming Changes from time to time.

**Decisions and Determinations.** Any determination, decision or election that may be made by the Issuer or by the calculation agent pursuant to the benchmark transition provisions described herein, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection:

- will be conclusive and binding absent manifest error;
- if made by the Issuer, will be made in its sole discretion;
- if made by the calculation agent, will be made after consultation with the Issuer, and the calculation agent will not make any such determination, decision or election to which the Issuer reasonably object; and
- notwithstanding anything to the contrary in the indenture or the notes, shall become effective without consent from the holders of the notes or any other party.

If the calculation agent does not make any determination, decision or election that it is required to make pursuant to the benchmark transition provisions, then the Issuer will make that determination, decision or election on the same basis as described above.

**Certain Defined Terms.** As used herein:

**“Benchmark Rate”** means, initially, Compounded SOFR; *provided* that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR (or the published daily SOFR used in the calculation thereof) or the then-current Benchmark Rate, then “Benchmark Rate” means the applicable Benchmark Replacement.

**“Benchmark Replacement”** means the first alternative set forth in the order below that can be determined by the calculation agent as of the Benchmark Replacement Date:

- (1) the sum of: (a) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark Rate and (b) the Benchmark Replacement Adjustment;
- (2) the sum of: (a) the ISDA Fallback Rate and (b) the Benchmark Replacement Adjustment;
- (3) the sum of: (a) the alternate rate of interest that has been selected by the Issuer as the replacement for the then-current Benchmark Rate giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark Rate for U.S. dollar-denominated floating rate notes at such time and (b) the Benchmark Replacement Adjustment.

**“Benchmark Replacement Adjustment”** means the first alternative set forth in the order below that can be determined by the calculation agent as of the Benchmark Replacement Date:



- (1) the spread adjustment (which may be a positive or negative value or zero), or method for calculating or determining such spread adjustment, that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;
- (2) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment;
- (3) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark Rate with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated floating rate notes at such time.

**“Benchmark Replacement Conforming Changes”** means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definitions of Interest Period and Observation Period, timing and frequency of determining rates and making payments of interest, rounding of amounts or tenors and other administrative matters) that the Issuer decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer determines is reasonably necessary).

**“Benchmark Replacement Date”** means the earliest to occur of the following events with respect to the then-current Benchmark:

- (1) in the case of clause (1) or (2) of the definition of “Benchmark Transition Event,” the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the Benchmark Rate permanently or indefinitely ceases to provide the Benchmark Rate; or
- (2) in the case of clause (3) of the definition of “Benchmark Transition Event,” the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

**“Benchmark Transition Event”** means the occurrence of one or more of the following events with respect to the then-current Benchmark Rate:

- (1) a public statement or publication of information by or on behalf of the administrator of the Benchmark Rate announcing that such administrator has ceased or will cease to provide the Benchmark Rate, permanently or indefinitely, *provided* that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark Rate;
- (2) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark Rate, the central bank for the currency of the Benchmark Rate, an insolvency official with jurisdiction over the administrator for the Benchmark Rate, a resolution authority with jurisdiction over the administrator for the Benchmark Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark Rate, which states that the administrator of the Benchmark Rate has ceased or will cease to provide the Benchmark Rate permanently or indefinitely, *provided* that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark Rate; or
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark Rate announcing that the Benchmark Rate is no longer representative.

**“Initial Interest Period”** means any initial Interest Periods during which a fixed rate of interest accrues, if applicable.

**“ISDA Definitions”** means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

**“ISDA Fallback Adjustment”** means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.

**“ISDA Fallback Rate”** means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

**“Reference Time”** with respect to any determination of the Benchmark Rate means (1) if the Benchmark Rate is Compounded SOFR, 3:00 p.m. New York time on the relevant day, and (2) if the Benchmark Rate is not Compounded SOFR, the time determined by the calculation agent in accordance with the Benchmark Replacement Conforming Changes.

**“Relevant Governmental Body”** means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

**“Unadjusted Benchmark Replacement”** means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

### ***U.S. Dollar SOFR ICE Swap Rate***

A U.S. Dollar SOFR ICE Swap Rate is a “constant maturity swap rate” that measures the annual fixed rate of interest payable on a hypothetical fixed-for-floating U.S. dollar interest rate swap transaction with a specified maturity. In such a hypothetical swap transaction, the fixed rate of interest, payable annually on an actual / 360 basis (*i.e.*, interest accrues based on the actual number of days elapsed, with a year assumed to comprise 360 days), is exchangeable for a floating payment stream based on SOFR (as defined below) (compounded in arrears for twelve months using standard market conventions), also payable annually on an actual / 360 basis. SOFR is intended to be a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities.

Unless otherwise specified in the relevant terms supplement, with respect to any day, the U.S. Dollar SOFR ICE Swap Rate refers to the rate for U.S. dollar swaps with a Designated Maturity specified in the relevant terms supplement, referencing the SOFR (compounded in arrears for twelve months using standard market conventions), that appears on the Relevant Bloomberg Screen Page at approximately 11:00 a.m., New York City time, on that day, as determined by the calculation agent, *provided* that, if no such rate appears on the Relevant Bloomberg Screen Page on that day at approximately 11:00 a.m., New York City time, then the calculation agent, after consulting such sources as it deems comparable to the foregoing display page, or any such source it deems reasonable from which to estimate the relevant rate for U.S. dollar swaps referencing SOFR, will determine the relevant U.S. Dollar SOFR ICE Swap Rate for that day in its sole discretion.

**“Relevant Bloomberg Screen Page”** means the display designated as the Bloomberg screen specified in the relevant terms supplement or such other page as may replace that Bloomberg screen on that service or such other service or services as may be nominated for the purpose of displaying rates for U.S. dollar swaps referencing SOFR by IBA or its successor or such other entity assuming the responsibility of IBA or its successor in calculating rates for U.S. dollar swaps referencing SOFR in the event IBA or its successor no longer does so.

Notwithstanding the foregoing paragraph:

- (i) If the calculation agent determines in its sole discretion on or prior to the relevant day that the relevant rate for U.S. dollar swaps referencing SOFR has been discontinued or that rate has ceased to be published permanently or indefinitely, then the calculation agent will use as the relevant U.S. Dollar SOFR ICE Swap Rate for that day a substitute or successor rate that it has determined in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, to be a commercially reasonable replacement rate; and
- (ii) If the calculation agent has determined a substitute or successor rate in accordance with the foregoing, the calculation agent may determine in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, the definitions of business day, Determination Dates, Business Day Convention, Interest Accrual Convention and Day Count Convention and any other relevant methodology for calculating that substitute or successor rate, including any adjustment factor, spread and/or formula it determines is needed to make that substitute or successor rate comparable to the relevant rate for U.S. dollar swaps referencing SOFR, in a manner that is consistent with industry-accepted practices for that substitute or successor rate.

Unless otherwise specified in the relevant pricing supplement, JPMS, one of the Issuer's affiliates, will act as the calculation agent for the notes. The Issuer may appoint a different calculation agent, including itself or another of its affiliate, from time to time after the date of the relevant pricing supplement without your consent and without notifying you. See "General Terms of Notes — Calculation Agent" above.

### ***EUR ICE Swap Rate***

A Euro ICE Swap Rate is a measurement of the fixed rate leg of a hypothetical fixed rate-for-floating rate swap transaction, which is referred to in this product supplement as a constant maturity swap. In this hypothetical swap transaction, the fixed rate payment stream is reset each period relative to a regularly available fixed maturity market rate (such as the 30-year or 10-year euro swap rate, payable annually on the basis of a 360-day year consisting of twelve 30-day months) and is exchangeable for a floating 6-month EURIBOR-based payment stream, payable semi-annually on the basis of the actual number of days elapsed in a 360-day year. EURIBOR is the Euro Interbank Offered Rate, and is a common rate of interest used in the swaps industry. The constant maturity side of the swap, which is referred to in this product supplement as the EUR ICE Swap Rate, represents the yield on an instrument with a longer life than the length of the fixed rate reset period. The value of the constant maturity swap is determined based on the comparison of the expected future EURIBOR rates versus the fixed constant maturity swap rate, so the parties to a constant maturity swap have exposure to changes in a longer-term market rate.

Unless otherwise specified in the relevant terms supplement, with respect to any day, the EUR ICE Swap Rate refers to the mid-market annual swap rate for a euro interest rate swap with the Designated Maturity specified in the relevant terms supplement that appears on the Reuters Screen ICESWAP2 Page under the heading "EURIBOR BASIS-EUR" and above the caption "11:00 AM Frankfurt" at approximately 11:15 a.m., Frankfurt, Germany time, on that day, as determined by the calculation agent, *provided* that, if no such rate appears on the Reuters Screen ICESWAP2 Page under the heading "EURIBOR BASIS-EUR" and above the caption "11:00 AM Frankfurt" on that day at approximately 11:15 a.m., Frankfurt, Germany time, then the calculation agent, after consulting such sources as it deems comparable to the foregoing display page, or any such source it deems reasonable from which to estimate the relevant mid-market annual swap rate for a euro interest rate swap, will determine the EUR ICE Swap Rate for that day in its sole discretion.

"**Reuters Screen ICESWAP2 Page**" means the display designated as the Reuters screen "ICESWAP2" or such other page as may replace the Reuters screen "ICESWAP2" on that service or such other service or services as may be nominated for the purpose of displaying mid-market annual swap rates for a euro interest rate swap by IBA or its successor or such other entity assuming the responsibility of IBA or its successor in calculating mid-market annual swap rates for a euro interest rate swap in the event IBA or its successor no longer does so.

Notwithstanding the foregoing paragraph:

- (i) If the calculation agent determines in its sole discretion on or prior to the relevant day that the relevant mid-market annual swap rate for a euro interest rate swap has been discontinued or that rate has ceased to be published permanently or indefinitely, then the calculation agent will use as the relevant EUR ICE Swap Rate for that day a substitute or successor rate that it has determined in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, to be (a) the industry-accepted successor rate to the relevant mid-market annual swap rate for a euro interest rate swap or (b) if no such industry-accepted successor rate exists, the most comparable substitute or successor rate to the relevant mid-market annual swap rate for a euro interest rate swap; and
- (ii) If the calculation agent has determined a substitute or successor rate in accordance with the foregoing, the calculation agent may determine in its sole discretion, after consulting an investment bank of national standing in the United States (which may be an affiliate of the Issuer) or any other source it deems reasonable, the Business Day Convention, the Interest Accrual Convention, the definitions of business day, Day Count Fraction and Determination Date and/or Observation Date and any other relevant methodology for calculating that substitute or successor rate, including any adjustment factor it determines is needed to make that substitute or successor rate comparable to the relevant mid-market annual swap rate for a euro interest rate swap, in a manner that is consistent with industry-accepted practices for that substitute or successor rate.

Unless otherwise specified in the relevant pricing supplement, JPMS, one of the Issuer's affiliates, will act as the calculation agent for the notes. The Issuer may appoint a different calculation agent, including (The Bank of New York Mellon), itself or another of its affiliate, from time to time after the date of the relevant pricing supplement without your consent and without notifying you. See "General Terms of Notes — Calculation Agent" above.

### **CPI Rate**

The Consumer Price Index for purposes of the notes (the "**CPI**") is the non-seasonally adjusted U.S. City Average All Items Consumer Price Index for All Urban Consumers, reported monthly by the Bureau of Labor Statistics of the U.S. Department of Labor (the "**BLS**") and published on Bloomberg CPURNSA or any successor source. The CPI for a particular month is published during the following month. The CPI is a measure of the average change in consumer prices over time for a fixed market basket of goods and services, including food, clothing, shelter, fuels, transportation, charges for doctors' and dentists' services and drugs. In calculating the CPI, price changes for various items are averaged together with weights that represent their importance in the spending of urban households in the United States. The contents of the market basket of goods and services and the weights assigned to various items are averaged together with weights that represent their importance in the spending of urban households in the United States. The contents of the market baskets of goods and services and the weights assigned to the various items are updated periodically by the BLS to take into account changes in consumer expenditure patterns. The CPI is expressed in relative terms in relation to a time base reference period for which the level is set at 100.0. The base reference period for these notes is the 1982-1984 average. All information contained in this product supplement regarding the CPI, including, without limitation, its make-up and method of calculation, has been derived from publicly available information, without independent verification.

Unless otherwise specified in the relevant terms supplement, with respect to any day, the "**CPI Rate**" refers to the change in the CPI calculated as follows:

$$\text{CPI Rate} = \frac{\text{CPI}_t - \text{CPI}_{t-x}}{\text{CPI}_{t-x}}$$

where:

"CPI<sub>t</sub>" is the level of the CPI for the calendar month prior to the calendar month of that day, which is referred to in this product supplement as the "**reference month**"; and

“CPI<sub>t-x</sub>” is the level of the CPI for the “x” calendar month prior to the reference month, where “x” will be a number specified in the relevant terms supplement. For example, if “x” is twelve, “CPI<sub>t-x</sub>” will be the level of the CPI for the twelfth calendar month prior to the reference month.

If by 3:00 p.m. New York City time on any relevant day, the CPI for any relevant month is not published on Bloomberg CPIRNSA (or any successor source) but has otherwise been reported by the BLS, then the calculation agent will determine the CPI as reported by the BLS for that month using such other source as on its face, after consultation with the Issuer, appears to accurately set forth CPI as reported by the BLS for that month.

In calculating CPI<sub>t</sub> and CPI<sub>t-x</sub>, the calculation agent will use the most recently available value of the CPI determined as described above and in the relevant terms supplement on the relevant day, even if such value has been adjusted from a previously reported value for the relevant month. However, if a value of CPI<sub>t</sub> or CPI<sub>t-x</sub> used by the calculation agent on any relevant day to determine the Interest Rate for the applicable Interest Period is subsequently revised by BLS, the Interest Rate determined on that day will not be revised.

If the CPI is rebased to a different year or period and the 1982-1984 CPI is no longer used, the base reference period for the notes will continue to be the 1982-1984 reference period as long as the 1982-1984 CPI continues to be published.

If, while the notes are outstanding, the CPI is discontinued or is substantially altered, as determined in the sole discretion of the calculation agent, the calculation agent will select a successor index, which will be that chosen by the Secretary of the Treasury for the Department of the Treasury’s Inflation-Linked Treasuries as described at Appendix B, Section I, Paragraph B.4 of Part IV of 69 Federal Register, No. 144 (July 28, 2004) or, if no such securities are outstanding, the successor index will be determined by the calculation agent acting in good faith and in a commercially reasonable manner.

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.

## **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.

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***

With respect to an 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 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 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 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 Index (or any relevant successor index) exists at any time, if trading in a security included in that 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 Index (or that successor index) will be based on a comparison of:

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



- limitations pursuant to the rules of any relevant exchange similar to New York Stock Exchange (“**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 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 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 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.

#### ***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 Observation 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 Observation 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, an Observation 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, Observation Date or other relevant date, then (a) the calculation agent will determine the closing level of that Index for that Determination Date, Observation 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 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.

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).

## 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”).

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.

The Issuer will not attempt to ascertain whether any issuer of a share or other ownership interest underlying an Index (each, an “**Underlying Issuer**”) should be treated as a “United States real property holding corporation” (a “**USRPHC**”) within the meaning of Section 897 of the Code or a “passive foreign investment company” (a “**PFIC**”) within the meaning of Section 1297 of the Code. If any Underlying Issuer were so treated, certain adverse U.S. federal income tax consequences might apply to you, in the case of a USRPHC if you are a Non-U.S. Holder (as defined below), and in the case of a PFIC if you are a U.S. Holder, upon a sale, exchange or other disposition of your notes.

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, possibly with retroactive effect. As the law applicable to the U.S. federal income taxation of instruments such as the notes is technical and complex, the discussion below necessarily represents only a general discussion. Moreover, the effects of any applicable state, local or non-U.S. tax laws are not discussed. **You should consult your tax adviser concerning the application of U.S. federal income and estate tax laws to your particular situation (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 treatment of an offering of notes for U.S. federal income tax purposes will depend upon the facts at the time of the offering. At the time of an offering, the Issuer may seek an opinion of counsel regarding the tax consequences of owning and disposing of the offered 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 Debt Instruments and That Have a Term of Not More than One Year***

The following discussion applies to notes that are properly treated as debt instruments for U.S. federal income tax purposes and that have a term of not more than one year (including either the issue date or the last possible date that the notes could be outstanding, but not both) ("**short-term obligations**").

Generally, a short-term obligation is treated for U.S. federal income tax purposes as issued at a discount equal to the difference between the payments due thereon and the instrument's issue price, and this discount is treated as interest income when received or accrued, as described further below. There is no authority, however, regarding the accrual of discount on short-term obligations that provide for contingent payments. No ruling will be requested from the IRS with respect to those notes. As a result, several aspects of the U.S. federal income tax consequences of an investment in the notes are uncertain, as discussed below.

***Tax Treatment Prior to Maturity.*** If you use a cash method of accounting for U.S. federal income tax purposes, you will not be required to recognize income with respect to the notes prior to receipt of payment on the notes, other than pursuant to a sale or exchange, as described below. You may, however, elect to accrue discount into income on a current basis, in which case you would be subject to the rules described in the following paragraph. Generally, if you own a short-term obligation and do not make this election, you will be required to defer deductions with respect to any interest paid on indebtedness incurred to purchase or carry the short-term obligation, to the extent of accrued discount that you have not yet included in income. As noted above, however, there is no authority regarding the accrual of discount on short-term obligations that provide for contingent payments. It is therefore unclear how, if at all, the rules regarding deferral of interest deductions would apply to those notes.

Generally, owners using an accrual method of accounting for U.S. federal income tax purposes and certain other owners of a short-term obligation (including electing cash-method owners) are required to accrue discount on the obligation into income on a straight-line basis. As noted above, however, there is

no authority regarding the accrual of discount on short-term obligations that provide for contingent payments. Consequently, the timing and amounts of the discount to be accrued on those notes is generally unclear. If the overall amount of discount that will be received has become fixed (or the likelihood of this amount not being a fixed amount has become remote) prior to maturity, it is more likely than not that the amount of discount to be accrued will be determined based on the fixed amount.

***Tax Treatment upon Sale, Exchange or Redemption.*** Upon a sale or exchange of a note (including early redemption or repurchase, acceleration or redemption at maturity), you will recognize gain or loss in an amount equal to the difference between the amount you receive and your adjusted basis in the note. Your adjusted basis in the note will equal the amount you paid to acquire the note, increased by any discount that you have previously included in income but not received. The amount of any resulting loss generally will be treated as a capital loss. A loss in excess of certain thresholds may be subject to special reporting requirements, although this is unclear. Gain recognized on redemption at maturity should be treated as ordinary interest income.

Generally, if you are a cash-method taxpayer who has not elected an accrual method of tax accounting in respect of the notes, gain recognized on a sale or exchange prior to maturity will be treated as ordinary interest income in an amount not exceeding the accrued but unpaid discount. As noted above, however, there is no authority regarding the accrual of discount on short-term obligations that provide for contingent payments. If the overall amount of discount that will be received at maturity has become fixed (or the likelihood of this amount not being a fixed amount has become remote) prior to the sale or exchange, it is more likely than not that the portion of your gain on the sale or exchange that will be treated as accrued discount (and, therefore, taxed as ordinary income) will be determined based on the fixed amount. If you are a cash-method U.S. Holder, any portion of gain attributable to fixed but unpaid interest will be treated as interest income to you.

Generally, if you own a short-term obligation and you are subject to an accrual method of tax accounting, gain recognized on a sale or exchange prior to maturity will be short-term capital gain, because accrued discount will already have been included in your income. As noted above, however, there is no authority regarding the accrual of discount on short-term obligations that provide for contingent payments. Consequently, there is uncertainty regarding what portion, if any, of gain recognized upon the sale or exchange prior to maturity of a note subject to an accrual method of tax accounting could be treated as short-term capital gain. Notwithstanding this uncertainty, if you are an accrual-method taxpayer, you will recognize ordinary income no later than, and in an amount not less than, if the notes were subject to cash-method accounting.

### ***Notes Treated as Debt Instruments and That Have a Term of More than One Year***

The following discussions apply to notes that are properly treated as debt instruments for U.S. federal income tax purposes and that have a term of more than one year (including either the issue date or the last possible date that the notes could be outstanding, but not both).

### ***Notes Treated as Contingent Payment Debt Instruments***

The following discussion applies to notes that are properly treated as “contingent payment debt instruments” for U.S. federal income tax purposes (“**CPDI Notes**”). Notes properly treated as contingent payment debt instruments will generally be subject to the original issue discount (“**OID**”) provisions of the Code and the Treasury regulations issued thereunder, and you will be required to accrue as interest income the OID on the notes as described below.

***Tax Treatment Prior to Maturity.*** The Issuer is required to determine a “comparable yield” for the CPDI Notes. The comparable yield is the yield at which the Issuer could issue a fixed-rate debt instrument with terms similar to those of the CPDI Notes, including the level of subordination, term, timing of payments and general market conditions, but excluding any adjustments for the riskiness of the contingencies or the liquidity of the CPDI Notes. Solely for purposes of determining the amount of interest income that you will be required to accrue, the Issuer is also required to construct a “projected payment schedule” in respect of the CPDI Notes representing a payment or a series of payments the

amount and timing of which would produce a yield to maturity on the CPDI Notes equal to the comparable yield.

Unless otherwise provided in the relevant terms supplement, the Issuer will provide, and you may obtain, the comparable yield for a particular offering of CPDI Notes, and the related projected payment schedule (or information about how to obtain them), in the final terms supplement for these CPDI Notes, which the Issuer will file with the Securities and Exchange Commission.

**Neither the comparable yield nor the projected payment schedule constitutes a representation by the Issuer regarding the actual amount(s) or timing of any contingent payment(s) that the Issuer will make on the CPDI Notes.**

For U.S. federal income tax purposes, you are required to use the Issuer's determination of the comparable yield and projected payment schedule in determining interest accruals and adjustments in respect of your CPDI Notes, unless you timely disclose and justify the use of other estimates to the IRS. Regardless of your method of tax accounting, you will be required to accrue as interest income OID on your CPDI Notes in each taxable year at the comparable yield, adjusted upward or downward to reflect the difference, if any, between the actual and the projected amount(s) of the contingent payment(s), if any, on the CPDI Notes during the year (as described below).

In addition to interest accrued based upon the comparable yield as described above, you will be required to recognize interest income equal to the amount of any net positive adjustment, *i.e.*, the excess of actual payments over projected payments, in respect of a CPDI Note for a taxable year. A net negative adjustment, *i.e.*, the excess of projected payments over actual payments, in respect of a CPDI Note for a taxable year:

- will first reduce the amount of interest in respect of the CPDI Note that you would otherwise be required to include in income in the taxable year; and
- to the extent of any excess, will give rise to an ordinary loss, but only to the extent that the total amount of all previous interest inclusions under the CPDI Note exceeds the total amount of your net negative adjustments treated as ordinary loss on the CPDI Note in prior taxable years.

A net negative adjustment is not subject to the limitation imposed on miscellaneous itemized deductions under Section 67 of the Code, and therefore can be deducted against other income such as employment income and interest income. Any net negative adjustment in excess of the amounts described above will be carried forward to offset future interest income in respect of the CPDI Note or to reduce the amount realized on a sale or exchange of the CPDI Note (including early redemption or repurchase, acceleration or redemption at maturity).

*Tax Treatment upon Sale, Exchange, Redemption, or Maturity.* Upon a sale or exchange of a CPDI Note (including early redemption or repurchase, acceleration or at maturity), you generally will recognize taxable income or loss equal to the difference between the amount received from the sale or exchange (reduced by any net negative adjustment carryforward, as described in the preceding paragraph) and your adjusted tax basis in the CPDI Note. Your adjusted tax basis in the CPDI Note will equal the amount you paid to acquire the CPDI Note, increased by the amount of interest income you have previously accrued in respect of the CPDI Note (determined without regard to any of the positive or negative adjustments to interest accruals described above) and decreased by the amount of any projected payments in respect of the CPDI Note through the date of the sale or exchange. You generally must treat any income as interest income and any loss as ordinary loss to the extent of previous interest inclusions (reduced by the total amount of net negative adjustments previously taken into account as ordinary losses), and the balance as capital loss. As with net negative adjustments, these ordinary losses are not subject to the limitation imposed on miscellaneous itemized deductions under Section 67 of the Code. The deductibility of capital losses, however, is subject to limitations. Additionally, if you recognize a loss above certain thresholds, you might be required to file a disclosure statement with the IRS, although this is uncertain.



Special rules may apply if one or more contingent payments becomes fixed prior to maturity. The applicability of these rules, and their potential consequences, will depend upon the specific terms of the relevant offering. Additional details regarding this issue may be provided in the relevant terms supplement.

### ***Notes Treated as Debt Instruments But Not Contingent Payment Debt Instruments***

**Qualified Stated Interest and Original Issue Discount.** If a note's stated redemption price at maturity exceeds its issue price by an amount that does not satisfy a de minimis test (as described below), the excess will be treated as original issue discount ("**OID**") for U.S. federal income tax purposes. Under applicable Treasury regulations, the "stated redemption price at maturity" of a debt instrument generally will equal the sum of all payments required under the debt instrument other than payments of qualified stated interest ("**QSI**"). QSI generally includes stated interest unconditionally payable at least annually at a single rate.

QSI paid on a note generally will be taxable to you as ordinary income at the time it accrues or is received, in accordance with your method of tax accounting. Unless any OID is less than a de minimis amount as described below, you will be required to include the OID, if any, in income for U.S. federal income tax purposes as it accrues, in accordance with a constant-yield method based on a compounding of interest. An optional redemption feature may affect whether a note has OID and the amount of such OID. If applicable, the relevant terms supplement will describe the tax treatment of notes with an optional redemption feature.

For each taxable year, the amount of OID that you must include in income in respect of a note will be the sum of the daily portions of OID for each day during the taxable year or any portion of the taxable year in which you held the note. These daily portions are determined by allocating to each day in an accrual period a *pro rata* portion of the OID allocable to that accrual period. Accrual periods may be of any length and may vary in length over the term of a note, though they may not be longer than one year and, to the extent there are any interest payments during the term of the notes, those payments must occur either on the final day or on the first day of an accrual period.

The amount of OID allocable to any accrual period generally will equal the product of a note's adjusted issue price at the beginning of the accrual period multiplied by its yield to maturity (as adjusted to take into account the length of the accrual period). The adjusted issue price of a note at the beginning of any accrual period will equal the issue price of the note, increased by all OID accrued in prior accrual periods and, to the extent there are interest payments during the term of the notes, reduced by any interest payments paid on the notes other than qualified stated interest. The yield to maturity of a note is the discount rate (appropriately adjusted to reflect the length of accrual periods) that causes the present value on the issue date of the payment at maturity on the note to equal the issue price.

You may make an election to include in gross income all interest that accrues on any note (including stated interest, original issue discount and de minimis original issue discount, as adjusted by any amortizable bond premium) in accordance with a constant yield method based on the compounding of interest (a "**constant yield election**"). Such election may be revoked only with the permission of the Internal Revenue Service (the "**IRS**").

**De Minimis Test.** A note will not be considered to have OID if the difference between the note's stated redemption price at maturity and its issue price is less than a de minimis amount, defined by applicable Treasury regulations as  $\frac{1}{4}$  of 1 percent of the stated redemption price at maturity multiplied by the number of complete years to maturity, or, in the case of an installment obligation (as defined by applicable Treasury regulations), the weighted average maturity. The weighted average maturity is the sum of the following amounts determined for each payment under the debt instrument other than a payment of QSI: (i) the number of complete years from the issue date of the note until the payment is made multiplied by (ii) a fraction, the numerator of which is the amount of the payment and the denominator of which is the note's stated redemption price at maturity.

**Amortizable Bond Premium.** If you purchase a note for an amount that is greater than the sum of all amounts payable on the note other than qualified stated interest, you will be considered to have

purchased the note with amortizable bond premium equal to such excess. Special rules may apply in the case of notes that are subject to optional redemption. You may generally use the amortizable bond premium allocable to an accrual period to offset qualified stated interest required to be included in your income with respect to the note in that accrual period. If you elect to amortize bond premium, you must reduce your tax basis in the note by the amount of the premium previously amortized. An election to amortize bond premium applies to all taxable debt obligations then owned and thereafter acquired by you and may be revoked only with the consent of the IRS.

If you make a constant yield election as described above for a note with amortizable bond premium, such election will result in a deemed election to amortize bond premium for all of your debt instruments with amortizable bond premium and may be revoked only with the permission of the IRS with respect to debt instruments acquired after revocation.

***Tax Treatment upon Sale, Exchange, Redemption, or Maturity.*** Upon the sale or exchange of a note (including early redemption or repurchase, acceleration or at maturity), you will recognize taxable gain or loss in an amount equal to the difference between the amount realized upon sale or exchange (other than with respect to amounts attributable to accrued but unpaid interest) and your adjusted tax basis in the note. Your adjusted tax basis in a note generally will equal your original purchase price for the note, increased by the amounts of any OID that you previously included in income with respect to the note, reduced by any amortized bond premium, and to the extent there are interest payments during the term of the note, reduced by any interest payments paid on the notes other than QSI. In general, gain or loss recognized upon the sale or exchange of a note will be capital gain or loss and will 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.

***Notes Treated as Debt Instruments That Provide for Fixed Interest Payments at a Single Rate and That Are Not Issued at a Discount***

The following discussion applies to notes that provide for fixed interest payments at a single rate and that are issued without OID for U.S. federal income tax purposes (“**fixed-rate debt instruments**”).

Stated interest paid on a note will be taxable to you as ordinary income at the time it accrues or is received, in accordance with your method of tax accounting.

***Notes Treated as Debt Instruments That Provide for Fixed Interest Payments at Multiple Rates***

For notes that provide for fixed interest payments at multiple rates (“**step-up fixed-rate debt instruments**”), interest will be QSI to the extent of the lowest stated interest rate that is unconditionally payable at least annually. Subject to the below and the de minimis test described above, any stated interest in excess of this rate will be treated as OID, as described above.

***Notes Subject to Early Redemption.*** A note that is subject to redemption (including an issuer call) prior to maturity may be subject to rules that differ from the general rule described above for purposes of determining the yield and maturity of the note (which may affect whether the note is treated as issued with OID and, if so, the timing of accrual of the OID). Under applicable Treasury regulations, the Issuer will generally be presumed to exercise an option to redeem a note if the exercise of the option will lower the yield on the note. If such an option is not in fact exercised, the note will be treated, solely for purposes of calculating QSI and OID, as if it were redeemed and a new note were issued on the presumed exercise date for an amount equal to the note’s adjusted issue price on that date.

Under these rules, if a note provides for fixed rates of interest that increase over the term of the note, and the Issuer has an option to redeem the note for an amount equal to the stated principal amount on or prior to the first date on which an increased rate of interest is in effect, the yield on the note generally will be lowered if the Issuer redeems the note before the initial increase in the interest rate. Because the note will therefore be treated as if it were redeemed prior to the initial increase in the interest rate, the note will not be treated as issued with OID, at least as long as the note’s issue price is at or above par. If a note described in this paragraph is not treated as issued with OID and if, contrary to the presumption in the applicable Treasury regulations, the Issuer does not redeem the note before the initial increase in the

interest rate, the same analysis will apply to all subsequent call options. The rules governing short-term debt instruments may apply to a note deemed reissued in conjunction with the final scheduled increase in the interest rate if the deemed reissued note matures in one year or less from the deemed reissue date. You should consult your tax adviser concerning the possible application of these rules.

### ***Notes Treated as Variable Rate Debt Instruments***

The following discussion applies to notes that are properly treated as “variable rate debt instruments” for U.S. federal income tax purposes (“**VRDI Notes**”). VRDI Notes provide for stated interest at current values of (i) one or more qualified floating rates (“**QFRs**”), (ii) a single fixed rate and one or more QFRs, (iii) a single objective rate or (iv) a single fixed rate and a single objective rate that is a “qualified inverse floating rate.” In general, a QFR is any variable rate for which variations in the value of the rate can reasonably be expected to measure contemporaneous variations in the cost of newly borrowed funds. An objective rate is a variable rate based on objective financial or economic information. A qualified inverse floating rate is any objective rate that is a fixed rate minus a QFR, as long as variations in the rate can reasonably be expected to inversely reflect contemporaneous variations in the QFR. If a VRDI Note provides for stated interest at a fixed rate for an initial period of one year or less followed by a variable rate and, as of the note’s issue date, the variable rate is intended to approximate the initial fixed rate, then the fixed rate and the variable rate together will constitute a single variable rate. Similarly, if two or more QFRs can reasonably be expected to have approximately the same values throughout the term of the note, then the two QFRs will be treated as a single QFR. The rules described in the next paragraph will apply to the deemed single variable rate to determine the amount of QSI and OID on the notes. The Issuer expects that there will be some risk that the IRS could determine that the treatment of certain of these notes was incorrect. The Issuer expects that there will be some risk that the IRS could determine such notes were in fact contingent payment debt instruments (as described above under “— Notes Treated as Contingent Payment Debt Instruments”). Any such determination could have adverse U.S. federal income tax consequences for you.

**Single Variable Rate.** For VRDI Notes that provide for stated interest at a single variable rate, the amount of QSI and OID (if any) is determined by treating the variable rate as a fixed rate equal to, in the case of a QFR or a qualified inverse floating rate, the value, as of the issue date, of the QFR or qualified inverse floating rate or, in the case of a single objective rate, a fixed rate that reflects the yield that is reasonably expected for the note. The amount of QSI allocable to an accrual period may be increased (or decreased) if the interest actually paid during an accrual period exceeds (or is less than) the interest assumed to be paid during the accrual period.

**Multiple Variable Rates.** In order to determine the amount of QSI and OID (if any) in respect of a VRDI Note that provides for multiple variable rates or one or more variable rates in addition to a single fixed rate, other than an initial fixed rate of the type discussed above, an equivalent fixed rate debt instrument must be constructed by: (i) first, converting the initial fixed rate (if any) to a QFR that would preserve the fair market value of the notes, and (ii) second, converting each QFR (including the QFR determined under (i) above), qualified inverse floating rate or objective rate to a fixed-rate substitute. This fixed-rate substitute will generally be the value of that QFR or qualified inverse floating rate as of the issue date of the notes or, in the case of an objective rate, a fixed rate that reflects the yield that is reasonably expected for the note. Then, if the equivalent fixed rate debt instrument’s stated redemption price at maturity exceeds its issue price by an amount that does not satisfy the de minimis test, the excess will be treated as OID. If the amount of interest you receive on the notes in a calendar year is greater than the amount of interest assumed to be paid or accrued, the excess is treated as additional QSI taxable to you as ordinary income. If the amount of interest you receive in a calendar year is less than the amount of interest assumed to be paid or accrued, any difference will reduce the amount of QSI you are treated as receiving and will therefore reduce the amount of ordinary income you are required to take into income. If the VRDI Note is subject to an optional redemption, the rules described above under “— Notes Treated as Debt Instruments That Provide for Fixed Interest Payments at Multiple Rates — Notes Subject to Early Redemption” will apply.

**Determination of Accrued Interest.** As discussed above, for purposes of determining the amount of gain or loss recognized upon the sale or exchange of a VRDI Note, the amount realized does not include any amount attributable to accrued interest, which will be treated as a payment of interest. There is no

controlling authority, however, regarding the accrual of an interest payment prior to the time it has become fixed. It is therefore unclear what, if any, portion of the amount realized upon the sale or exchange of a VRDI Note prior to the applicable Determination Date for the next succeeding interest payment date will be treated as a payment of accrued interest.

### ***Notes Treated as Open Transactions That Are Not Debt Instruments***

The following describes the material U.S. federal income tax consequences of owning and disposing 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. The tax consequences of the ownership and disposition of these notes are uncertain. There is no direct legal authority as to the proper U.S. federal income tax characterization of these notes, and the Issuer does not intend to request a ruling from the IRS regarding these notes.

***Tax Treatment as Open Transactions That Are Not Debt Instruments.*** Under this treatment, you should not recognize taxable income or loss over the term of the notes other than pursuant to a sale or exchange (including acceleration, early redemption or repurchase, or a deemed taxable event, as described below, or at maturity) as described below. 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 generally should be treated as long-term capital gain or loss if you have held the note for more than a year, except that it is less clear whether gain or loss realized with respect to rate-linked notes will be treated as capital or ordinary. You should consult your tax adviser concerning the potential treatment of gain or loss as ordinary gain or loss. The deductibility of capital losses is subject to limitations.

***Potential Application of the Constructive Ownership Rules.*** If a “pass-thru entity” (as defined in the Code) is a component of an Underlying, 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 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, if an Underlying is an Index that consists solely of interests in pass-thru entities, 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 interests in the relevant pass-thru entities and sold those interests 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. In addition, if you are an individual or other non-corporate taxpayer, and if a pass-thru entity that is a component of an Underlying holds one of certain commodities and other conditions are met, it is possible that the long-term capital gain that you would otherwise recognize, up to the amount of the net underlying long-term capital gain, could be subject to tax at the higher rate applicable to “collectibles” rather than the rate applicable to long-term capital gain. 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 will be able to opine as to whether or how these rules will 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; whether these instruments are or should be subject to the “constructive ownership” regime described above; and the degree, if any, to which income (including any mandated accruals) realized by non-U.S. investors should be subject to withholding tax. 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 are expected to be governed by the rules relating to the taxation of contingent payment debt instruments, as described above in “— Notes Treated as 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.

#### *Possible Taxable Event*

It is possible that a material change to the terms of a series of notes (which might include a reorganization event, a change in the components of an Index, the designation of a successor equity index, or other similar circumstances) could result in the notes being treated as terminated and reissued for U.S. federal income tax purposes (a “**taxable event**”). In that event, you might be required to recognize gain or loss (subject to the possible application of the wash sale rules) with respect to your notes, and your holding period for your notes could be affected. Moreover, depending on the facts at the time of the taxable event, the reissued notes could be characterized for U.S. federal income tax purposes in a manner different from their original treatment, which could have material and potentially adverse consequences with respect to the timing and character of income that you recognize with respect to your notes following the taxable event. You should consult your tax adviser regarding the consequences of a taxable event with respect to the notes.

#### *Notes Treated as Units Each Comprising a Derivative Contract 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 derivative contract 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 derivative contract 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 derivative contract (a “**Derivative Contract**”) that, if not terminated, requires you to pay the Issuer at maturity an amount equal to the Deposit (as defined below) in exchange for your receipt of an amount equal to the payment at maturity (*i.e.*, a cash payment from the Issuer based on the Base Rate(s)) and the Derivative Payments (as defined below) and (ii) a deposit of \$1,000 per \$1,000 principal amount note to secure your potential obligation under the Derivative Contract (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 paid to you in consideration of your entry into the Derivative Contract (a “**Derivative Payment**”). 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 the Derivative Payment, respectively. The tax consequences of the ownership and disposition of these notes are uncertain. There is no direct legal authority as to the proper

U.S. federal income tax characterization of these notes, and the Issuer does not intend to request a ruling from the IRS regarding these notes.

Under the treatment described above, your tax consequences of entering into the Derivative Contract are unclear. We believe that one reasonable treatment of the Derivative Contract is as a notional principal contract, in which case you may be required to accrue the Derivative Payments into income under applicable Treasury regulations periodically (prior to the receipt of the corresponding cash), although it is possible that this income could be offset in whole or part by an imputed deduction, as described in the preamble to certain proposed Treasury regulations governing notional principal contracts with contingent nonperiodic payments (which might affect the treatment of the Derivative Contract at maturity, as discussed further below). To the extent that we have reporting obligations with respect to the notes, we intend to treat the Derivative Contract as a notional principal contract, and the remainder of this discussion assumes that this treatment is respected, unless otherwise indicated.

*Notes Treated as Units Each Comprising a Derivative Contract and a Deposit and That Have a Term of Not More than One Year*

If the term of a series of notes treated as units (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, as described above under “— Notes Treated as Debt Instruments with a Term of Not More than One Year.”

The tax treatment of Derivative Payments is unclear. To the extent that we have reporting obligations with respect to Derivative Payments, we intend to report them in a manner consistent with treating the Derivative Contract as a notional principal contract, as described above. However, there are other reasonable treatments that the IRS or a court may adopt, as described below under “— Other Possible Tax Treatments.” You should consult your tax adviser with regard to the treatment of Derivative Payments that you pay or receive.

*Sale or Exchange of a Note.* Upon sale or exchange of a note prior to maturity (other than an early redemption pursuant to the terms of the note), the Deposit will be treated as sold for its fair market value. The amount of 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 treated as short-term capital gain or loss, except that, if you are a cash-method taxpayer who has not elected to accrue discount with respect to the Deposit into income currently, you will recognize ordinary income to the extent of the lesser of the accrued but unpaid discount on the Deposit and your gain on the Deposit, and any remaining gain on the Deposit will be treated as short-term capital gain.

If the Derivative Contract is properly treated as a notional principal contract, the sale or exchange of a note should be treated as a “termination” of the notional principal contract. The rules related to the termination of a notional principal contract under these circumstances are complex, and depend in part upon how the Derivative Payments have been treated prior to the termination. Although not free from doubt, gain or loss resulting from the termination of the notional principal contract should be treated as short-term capital gain or loss. The deductibility of capital losses is subject to limitations. It is possible that the gain or loss resulting from the termination of the notional principal contract could be characterized as ordinary income or loss. If your loss is characterized as an ordinary loss and you are an individual, your corresponding deduction may be unavailable or, after December 31, 2025, subject to the 2% floor on “miscellaneous itemized deductions.” You should consult your tax adviser concerning the tax consequences of a sale or exchange of a note prior to maturity.

*Tax Treatment upon Maturity or Certain Early Redemptions.* If the Derivative Contract is properly treated as a notional principal contract, and if a note is held to maturity or redeemed earlier pursuant to its terms, although not free from doubt, any gain or loss recognized by you with respect to the Derivative Contract should be short-term capital gain or loss. However, it is possible that the gain or loss could be characterized as ordinary. As noted above, your ability to deduct losses (whether capital or ordinary) may



be limited. You should consult your tax adviser regarding the application of the relevant rules to the maturity or early redemption of the Derivative Contract, including certain rules relating to the treatment of “nonperiodic payments” and the calculation of gain or loss.

*Other Possible Tax Treatments.* The tax treatment of the notes is unclear. There are other reasonable treatments that the IRS or a court may adopt, in which case the timing and character of any income or loss on the notes could be materially and adversely affected. For instance, the Derivative Payments could be viewed as in the nature of consideration for entry into an option or option-like derivative position with respect to the underlying Base Rate(s), in which case you might not be required to recognize income with respect to them prior to maturity. Under that treatment, although not free from doubt, gain or loss recognized by you with respect to the Derivative Contract upon taxable disposition of the note (including upon early redemption or at maturity) should be treated as short-term capital gain or loss.

Alternatively, 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.

Moreover, 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 Derivative Payments 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. Purchasers of these notes who are not initial purchasers at the issue price should also consult their tax advisers with respect to the tax consequences of an investment in the notes, including possible alternative treatments, as well as the allocation of the purchase price of the notes between the Deposit and the Derivative Contract.

*Possible Taxable Event.* It is possible that a material change to the terms of a series of notes could result in a taxable event, as defined and described above in “— Notes Treated as Open Transactions That Are Not Debt Instruments — Possible Taxable Event.”

*Notes Treated as Units Each Comprising a Derivative Contract and a Deposit and That Have a Term of More than One Year*

If the term of a series of notes treated as units (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.

The tax treatment of Derivative Payments is unclear. To the extent that we have reporting obligations with respect to Derivative Payments, we intend to report them in a manner consistent with treating the Derivative Contract as a notional principal contract, as described above under “—Notes Treated as Units Each Comprising a Derivative Contract and a Deposit.” However, there are other reasonable treatments that the IRS or a court may adopt, as described below under “— Other Possible Tax Treatments.” You should consult your tax adviser with regard to accounting for Derivative Payments that you pay or receive.

***Sale or Exchange of a Note.*** Upon sale or exchange of a note prior to maturity (other than an early redemption pursuant to the terms of the note), the Deposit will be treated as sold for its fair market value, excluding any accrued but unpaid interest, which will be treated as described above. The amount of 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 treated as long-term capital gain or loss if the note was held for more than one year.

If the Derivative Contract is properly treated as a notional principal contract, the sale or exchange of a note should be treated as a “termination” of the notional principal contract. The rules related to the termination of a notional principal contract under these circumstances are complex, and depend in part upon how the Derivative Payments have been treated prior to the termination. Although not free from doubt, gain or loss resulting from the termination of the notional principal contract should be treated as long-term capital gain or loss if the note was held for more than one year. The deductibility of capital losses is subject to limitations. It is possible that the gain or loss resulting from the termination of the notional principal contract could be characterized as ordinary income or loss. If your loss is characterized as an ordinary loss and you are an individual, your corresponding deduction may be unavailable or, after December 31, 2025, subject to the 2% floor on “miscellaneous itemized deductions.” You should consult your tax adviser concerning the tax consequences of a sale or exchange of a note prior to maturity.

***Tax Treatment upon Maturity or Certain Early Redemptions.*** If the Derivative Contract is properly treated as a notional principal contract, and if a note is held to maturity or redeemed earlier pursuant to its terms, although not free from doubt, any gain or loss recognized by you with respect to the Derivative Contract should be capital gain or loss, which gain or loss should be long-term capital gain or loss if the note is held for more than one year. However, it is possible that the gain or loss could be characterized as ordinary. As noted above, your ability to deduct losses (whether capital or ordinary) may be limited. You should consult your tax adviser regarding the application of the relevant rules to the maturity or early redemption of the Derivative Contract, including certain rules relating to the treatment of “nonperiodic payments” and the calculation of gain or loss.

***Other Possible Tax Treatments.*** The tax treatment of the notes is unclear. There are other reasonable treatments that the IRS or a court may adopt, in which case the timing and character of any income or loss on the notes could be materially and adversely affected. For instance, the Derivative Payments could be viewed as in the nature of consideration for entry into an option or option-like derivative position with respect to the underlying Base Rate(s), in which case you might not be required to recognize income with respect to them prior to maturity. Under that treatment, although not free from doubt, gain or loss recognized by you with respect to the Derivative Contract upon taxable disposition of the note (including upon early redemption or at maturity) should be treated as short-term capital gain or loss.

Alternatively, 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 generally will be treated as interest income. In addition, you could be subject to special reporting requirements if any loss exceeded certain thresholds.

Moreover, 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, 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 Derivative Payments 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. Purchasers of these notes who are not initial purchasers at the issue price

should also consult their tax advisers with respect to the tax consequences of an investment in the notes, including possible alternative treatments, as well as the allocation of the purchase price of the notes between the Deposit and the Derivative Contract.

*Possible Taxable Event.* It is possible that a material change to the terms of a series of notes could result in a taxable event, as defined and described above in “— Notes Treated as Open Transactions That Are Not Debt Instruments — Possible Taxable Event.”

### ***Notes Treated as Prepaid Financial 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 financial 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 financial contracts with associated contingent coupons for U.S. federal income tax purposes. The tax consequences of the ownership and disposition of these notes are uncertain. There is no direct legal authority as to the proper U.S. federal income tax characterization of these notes, and the Issuer does not intend to request a ruling from the IRS regarding these notes.

*Tax Treatment of Contingent Interest Payments.* Although the U.S. federal income tax treatment of contingent interest payments (including any contingent interest payments made in connection with an early redemption or repurchase, acceleration or redemption 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 early redemption or repurchase, acceleration or at maturity), although not free from doubt, 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). Although not free from doubt, 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.

*Uncertainties Regarding Tax Treatment as Prepaid Financial Contracts with Associated Contingent Coupons.* If the offered notes are treated as prepaid financial 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.

Moreover, 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, as 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.” While it is not entirely clear whether the notes would be viewed as similar to the typical prepaid forward contract described in the notice, this notice may apply to your notes and 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 are expected to be governed by the rules relating to the taxation of contingent payment debt instruments, as described above in “— Notes Treated as 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.

***Possible Taxable Event.*** It is possible that a material change to the terms of a series of notes could result in a taxable event, as defined and described above in “— Notes Treated as Open Transactions That Are Not Debt Instruments — Possible Taxable Event.”

## **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 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 Derivative Contract and Deposit, possibly with retroactive effect.

The U.S. federal income tax treatment of Contingent Interest Notes is uncertain, and although we believe it is reasonable to take a position that contingent interest payments are not subject to U.S. withholding tax (at least if an applicable Form W-8 is provided), it is expected that withholding agents will (and we, if we are the withholding agent, intend to) withhold on any contingent interest payment paid to a Non-U.S. Holder generally at a rate of 30% or at a reduced rate specified by an applicable income tax treaty under an “other income” or similar provision. We will not be required to pay any additional amounts with respect to amounts withheld. In order to claim an exemption from, or a reduction in, the 30% withholding tax, a Non-U.S. Holder of the notes must comply with certification requirements to establish that it is not a U.S. person and is eligible for such an exemption or reduction under an applicable tax treaty. If you are a Non-U.S. Holder, you should consult your tax adviser regarding the tax treatment of the notes, including the possibility of obtaining a refund of any withholding tax and the certification requirement described above.

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 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, 2025 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. 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 which is not treated as indebtedness is likely to be treated as U.S.-situs property, subject to U.S. federal estate tax. A note which is properly treated as indebtedness will not be treated as U.S.-situs property subject to U.S. federal estate tax, provided that income from the note is not then effectively connected with the conduct of a U.S. trade or business. 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 non-U.S. 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 non-U.S. 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 including “dividend equivalents” (as described above). If a note is treated in whole or in part as indebtedness or if it gives rise to “dividend equivalents,” 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 CERTAIN OF THE NOTES ARE UNCLEAR. 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**”), 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, 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**”), 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, the “**Agents**”), JPMS has agreed and any additional Agents will agree to use reasonable efforts to solicit offers to purchase the principal amount of notes set forth in the cover page of the relevant terms supplement.

The Issuer will have the sole right to accept offers to purchase the notes and may reject any offer in whole or in part. Each Agent may reject, in whole or in part, any offer it solicited to purchase notes. The Issuer will pay an Agent, in connection with sales of these notes resulting from a solicitation that Agent made or an offer to purchase that Agent received, a commission as set forth in the relevant terms supplement. An Agent 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.

The Issuer may also sell notes to an Agent as principal for its own account at discounts to be agreed upon at the time of sale as disclosed in the relevant terms supplement. That Agent may resell notes to investors and other purchasers at a fixed offering price or at prevailing market prices, or prices related thereto at the time of resale or otherwise, as that Agent determines and as the Issuer will specify in the relevant terms supplement. An Agent may offer the notes it has purchased as principal to other dealers. That Agent may sell the notes to any dealer at a discount and, unless otherwise specified in the relevant terms supplement, the discount allowed to any dealer will not be in excess of the discount that Agent will receive from the Issuer. After the initial public offering of notes that the Agent is to resell on a fixed public offering price basis, the Agent may change the public offering price, concession and discount.

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.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to that trade expressly agree otherwise. Effective on May 28, 2024 (the "**settlement cycle effective date**"), the standard settlement cycle under Rule 15c6-1 will be shortened from two business days to one business day. The Issuer expects that delivery of the notes will be made against payment for the notes on the settlement date specified in the relevant terms supplement, which may be more than two business days (or, on or after the settlement cycle effective date, one business day) following the pricing date specified in the relevant terms supplement. Accordingly, if the initial settlement of the notes occurs more than two business days (or, on or after the settlement cycle effective date, one business day) after the pricing date, purchasers who wish to trade the notes on any date prior to two business days (or, on or after the settlement cycle effective date, one business day) 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 their businesses, JPMorgan Chase & Co. and its current and future affiliates (including JPMorgan Financial), as well as the other unaffiliated dealers, may be Parties in Interest with respect to many Plans; where any of them 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, holding and subsequent disposition 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) (collectively, "**Non-ERISA Arrangements**") are not subject to the fiduciary responsibility or 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 be deemed to have represented by its purchase or holding of the notes, that its purchase, holding and subsequent disposition of the notes 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 of the notes 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, the Guarantor (if applicable) or any of their affiliates, 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 accounts in connection with (A) all transactions relating to the notes and (B) all hedging transactions in connection with its or its affiliates’ 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. Neither this discussion nor anything in this product supplement is or is intended to be investment advice directed at any potential Plan, Plan Asset Entity or Non-ERISA Arrangement purchaser or at such purchasers generally.