

DEUTSCHE BANK AKTIENGESELLSCHAFT  
Form 424B2  
July 12, 2017

**Pricing Supplement**

*To product supplement B dated July 31, 2015,*

*Pricing Supplement No. 2863B*

*prospectus supplement dated July 31, 2015 and*

*Registration Statement No. 333-206013*

*prospectus dated April 27, 2016*

*Rule 424(b)(2)*

**The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement and the accompanying product supplement, prospectus supplement and prospectus do not constitute an offer to sell nor do they seek an offer to buy the notes in any jurisdiction where the offer or sale is not permitted.**

Subject to Completion. Dated July 12, 2017

**Deutsche Bank**

**Structured Deutsche Bank AG  
Investments \$ Capped Return Enhanced Notes Linked to the PHLX Semiconductor Sector Index<sup>sm</sup> due  
August 1, 2018**

**General**

The notes are designed for investors who seek a return at maturity of two times the potential positive performance (if any) of the PHLX Semiconductor Sector Index<sup>sm</sup> (the “**Underlying**”), subject to a Maximum Return of 22.40%. However, if the Final Level is less than the Initial Level, for each \$1,000 Face Amount of notes, investors will lose 1.00% of the Face Amount for every 1.00% by which the Final Level is less than the Initial Level. The notes do not pay any coupons or dividends and investors should be willing to lose some or all of their investment if the Final Level is less than the Initial Level. Any payment on the notes is subject to the credit of the Issuer.

Senior unsecured obligations of Deutsche Bank AG due August 1, 2018

Minimum purchase of \$10,000. Minimum denominations of \$1,000 (the “**Face Amount**”) and integral multiples thereof.

The notes are expected to price on or about July 14, 2017 (the “**Trade Date**”) and are expected to settle on or about July 19, 2017 (the “**Settlement Date**”).

**Key Terms**

Issuer: Deutsche Bank  
 AG, London  
 Branch  
 PHLX

Underlying: Semiconductor  
 Sector Index<sup>SM</sup>  
 (Ticker: SOX)

Issue Price: 100% of the  
 Face Amount

Upside Leverage Factor: 2.00  
 22.40%. The  
 actual  
 Maximum  
 Return on the  
 notes will be  
 determined on  
 the Trade Date  
 and will not be  
 less than

Maximum Return: 22.40%.  
 Accordingly,  
 the maximum  
 Payment at  
 Maturity will  
 not be less than  
 \$1,224.00 per  
 \$1,000 Face  
 Amount of  
 notes.

Payment at Maturity: **If the  
 Final Level is  
 greater than  
 the Initial  
 Level**, you will  
 receive a cash  
 payment at  
 maturity per  
 \$1,000 Face  
 Amount of  
 notes  
 calculated as  
 follows:

\$1,000 +  
 (\$1,000 x the  
 lesser of (i)  
 Underlying  
 Return x  
 Upside

Leverage  
Factor and (ii)  
Maximum  
Return)

· **If the  
Final Level is  
equal to the  
Initial Level,**  
you will  
receive a cash  
payment at  
maturity equal  
to the Face  
Amount per  
\$1,000 Face  
Amount of  
notes.

· **If the  
Final Level is  
less than the  
Initial Level,**  
you will  
receive a cash  
payment at  
maturity per  
\$1,000 Face  
Amount of  
notes  
calculated as  
follows:

\$1,000 +  
(\$1,000 x  
Underlying  
Return)

*If the Final  
Level is less  
than the Initial  
Level, you will  
be fully  
exposed to the  
negative  
Underlying  
Return and, for  
each \$1,000  
Face Amount of  
notes, you will  
lose 1.00% of*

*the Face Amount for every 1.00% by which the Final Level is less than the Initial Level. In this circumstance, you will lose some or all of your investment at maturity. Any payment at maturity is subject to the credit of the Issuer.*

Underlying Return:

The performance of the Underlying from the Initial Level to the Final Level, calculated as follows:

Final Level –  
Initial Level  
Initial Level

*The Underlying Return may be positive, zero or negative.*

Initial Level:

The closing level of the Underlying on the Trade Date

*(Key Terms continued on next page)*

**Investing in the notes involves a number of risks. See “Risk Factors” beginning on page 7 of the accompanying product supplement, page PS-5 of the accompanying prospectus supplement and page 13 of the accompanying prospectus and “Selected Risk Considerations” beginning on page 8 of this pricing supplement.**

**The Issuer’s estimated value of the notes on the Trade Date is approximately \$956.60 to \$976.60 per \$1,000 Face Amount of notes, which is less than the Issue Price. Please see “Issuer’s Estimated Value of the Notes” on page 3 of this pricing supplement for additional information.**

**By acquiring the notes, you will be bound by and deemed irrevocably to consent to the imposition of any Resolution Measure (as defined below) by the competent resolution authority, which may include the write down of all, or a portion, of any payment on the notes or the conversion of the notes into ordinary shares or other instruments of ownership. If any Resolution Measure becomes applicable to us, you may lose some or all of your investment in the notes. Please see “Resolution Measures and Deemed Agreement” on page 4 of this pricing supplement for more information.**

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

	<b>Price to Public<sup>(1)</sup></b>	<b>Fees<sup>(1)(2)</sup></b>	<b>Proceeds to Issuer</b>
<b>Per Note</b>	\$1,000.00	\$10.00	\$990.00
<b>Total</b>	\$	\$	\$

JPMorgan Chase Bank, N.A. and J.P. Morgan Securities LLC, which we refer to as JPMS LLC, or one of its affiliates will act as placement agents for the notes. The placement agents will forgo fees for sales to

- (1) fiduciary accounts. The total fees represent the amount that the placement agents receive from sales to accounts other than such fiduciary accounts. The placement agents will receive a fee from the Issuer that will not exceed \$10.00 per \$1,000 Face Amount of notes.

(2) Please see “Supplemental Plan of Distribution” in this pricing supplement for more information about fees.

*The notes are not deposits or savings accounts and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other U.S. or foreign governmental agency or instrumentality.*

**JPMorgan**

**Placement Agent**

July , 2017

*(Key Terms continued from previous page)*

Final Level: The arithmetic average of the closing levels of the Underlying on each of the five Averaging Dates

Trade Date<sup>2</sup>: July 14, 2017

Settlement Date<sup>2</sup>: July 19, 2017

Averaging Dates<sup>1, 2</sup>: July 23, 2018, July 24, 2018, July 25, 2018, July 26, 2018 and July 27, 2018

Maturity Date<sup>1, 2</sup>: August 1, 2018

Listing: The notes will not be listed on any securities exchange.

CUSIP / ISIN: 25155MCJ8 / US25155MCJ80

<sup>1</sup>Subject to adjustment as described under “Description of Securities — Adjustments to Valuation Dates and Payment Dates” in the accompanying product supplement.

<sup>2</sup>In the event that we make any changes to the expected Trade Date or Settlement Date, the Averaging Dates and Maturity Date may be changed so that the stated term of the notes remains the same.

### **Issuer's Estimated Value of the Notes**

The Issuer's estimated value of the notes is equal to the sum of our valuations of the following two components of the notes: (i) a bond and (ii) an embedded derivative(s). The value of the bond component of the notes is calculated based on the present value of the stream of cash payments associated with a conventional bond with a principal amount equal to the Face Amount of notes, discounted at an internal funding rate, which is determined primarily based on our market-based yield curve, adjusted to account for our funding needs and objectives for the period matching the term of the notes. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the notes, reduces the economic terms of the notes to you and is expected to adversely affect the price at which you may be able to sell the notes in any secondary market. The value of the embedded derivative(s) is calculated based on our internal pricing models using relevant parameter inputs such as expected interest and dividend rates and mid-market levels of price and volatility of the assets underlying the notes or any futures, options or swaps related to such underlying assets. Our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect.

The Issuer's estimated value of the notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the notes. The difference between the Issue Price and the Issuer's estimated value of the notes on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the notes through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge.

The Issuer's estimated value of the notes on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your notes in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the notes from you in secondary market transactions, if at all, would generally be lower than both the Issue Price and the Issuer's estimated value of the notes on the Trade Date. Our purchase price, if any, in secondary market transactions will be based on the estimated value of the notes determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the notes and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our notes for use on customer account statements would generally be determined on the same basis. However, during the period of approximately six months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the notes on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

## Resolution Measures and Deemed Agreement

On May 15, 2014, the European Parliament and the Council of the European Union adopted a directive establishing a framework for the recovery and resolution of credit institutions and investment firms (commonly referred to as the “**Bank Recovery and Resolution Directive**”). The Bank Recovery and Resolution Directive required each member state of the European Union to adopt and publish by December 31, 2014 the laws, regulations and administrative provisions necessary to comply with the Bank Recovery and Resolution Directive. Germany adopted the Recovery and Resolution Act (*Sanierungs- und Abwicklungsgesetz*, or the “**Resolution Act**”), which became effective on January 1, 2015. The Bank Recovery and Resolution Directive and the Resolution Act provided national resolution authorities with a set of resolution powers to intervene in the event that a bank is failing or likely to fail and certain other conditions are met. From January 1, 2016, the power to initiate resolution measures applicable to significant banking groups (such as Deutsche Bank Group) in the European Banking Union has been transferred to the European Single Resolution Board which, based on the European Union regulation establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund (the “**SRM Regulation**”), works in close cooperation with the European Central Bank, the European Commission and the national resolution authorities. Pursuant to the SRM Regulation, the Resolution Act and other applicable rules and regulations, the notes may be subject to any Resolution Measure by the competent resolution authority if we become, or are deemed by the competent supervisory authority to have become, “non-viable” (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. By acquiring the notes, you will be bound by and deemed irrevocably to consent to the provisions set forth in the accompanying prospectus, which we have summarized below.

By acquiring the notes, you will be bound by and deemed irrevocably to consent to the imposition of any Resolution Measure by the competent resolution authority. Under the relevant resolution laws and regulations as applicable to us from time to time, the notes may be subject to the powers exercised by the competent resolution authority to: (i) write down, including to zero, any payment (or delivery obligations) on the notes; (ii) convert the notes into ordinary shares of (a) the Issuer, (b) any group entity or (c) any bridge bank or other instruments of ownership of such entities qualifying as common equity tier 1 capital; and/or (iii) apply any other resolution measure including, but not limited to, any transfer of the notes to another entity, the amendment, modification or variation of the terms and conditions of the notes or the cancellation of the notes. We refer to each of these measures as a “**Resolution Measure**.” A “group entity” refers to an entity that is included in the corporate group subject to a Resolution Measure. A “bridge bank” refers to a newly chartered German bank that would receive some or all of our assets, liabilities and material contracts, including those attributable to our branches and subsidiaries, in a resolution proceeding.

Furthermore, by acquiring the notes, you:

are deemed irrevocably to have agreed, and you will agree: (i) to be bound by, to acknowledge and to accept any Resolution Measure and any amendment, modification or variation of the terms and conditions of the notes to give effect to any Resolution Measure; (ii) that you will have no claim or other right against us arising out of any Resolution Measure; and (iii) that the imposition of any Resolution Measure will not constitute a default or an event of default under the notes, under the senior indenture dated November 22, 2006 among us, Law Debenture Trust



Company of New York, as trustee, and Deutsche Bank Trust Company Americas, as issuing agent, paying agent, authenticating agent and registrar, as amended and supplemented from time to time (the “**Indenture**”), or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act of 1939, as amended (the “**Trust Indenture Act**”);

waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the paying agent, the issuing agent and the registrar (each, an “**indenture agent**”) for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the notes; and

will be deemed irrevocably to have: (i) consented to the imposition of any Resolution Measure as it may be imposed without any prior notice by the competent resolution authority of its decision to exercise such power with respect to the notes; (ii) authorized, directed and requested The Depository Trust Company (“**DTC**”) and any direct participant in DTC or other intermediary through which you hold such notes to take any and all necessary action, if required, to implement the imposition of any Resolution Measure with respect to the notes as it may be imposed, without any further action or direction on your part or on the part of the trustee or the indenture agents; and (iii) acknowledged and accepted that the Resolution Measure provisions described herein and in the “Resolution Measures” section of the accompanying prospectus are exhaustive on the matters described herein and therein to the exclusion of any other agreements, arrangements or understandings between you and the Issuer relating to the terms and conditions of the notes.

*This is only a summary, for more information please see the accompanying prospectus dated April 27, 2016, including the risk factors beginning on page 13 of such prospectus.*

### **Additional Terms Specific to the Notes**

You should read this pricing supplement together with product supplement B dated July 31, 2015, the prospectus supplement dated July 31, 2015 relating to our Series A global notes of which these notes are a part and the prospectus dated April 27, 2016. Delaware Trust Company, which acquired the corporate trust business of Law Debenture Trust Company of New York, is the successor trustee of the notes. When you read the accompanying product supplement and prospectus supplement, please note that all references in such supplements to the prospectus dated July 31, 2015, or to any sections therein, should refer instead to the accompanying prospectus dated April 27, 2016 or to the corresponding sections of such prospectus, as applicable, unless otherwise specified or the context otherwise requires. You may access these documents on the website of the Securities and Exchange Commission (the “SEC”) at [www.sec.gov](http://www.sec.gov) as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

Product supplement B dated July 31, 2015:

[http://www.sec.gov/Archives/edgar/data/1159508/000095010315006059/crt\\_dp58181-424b2.pdf](http://www.sec.gov/Archives/edgar/data/1159508/000095010315006059/crt_dp58181-424b2.pdf)

Prospectus supplement dated July 31, 2015:

[http://www.sec.gov/Archives/edgar/data/1159508/000095010315006048/crt-dp58161\\_424b2.pdf](http://www.sec.gov/Archives/edgar/data/1159508/000095010315006048/crt-dp58161_424b2.pdf)

Prospectus dated April 27, 2016:

<http://www.sec.gov/Archives/edgar/data/1159508/000119312516559607/d181910d424b21.pdf>

Our Central Index Key, or CIK, on the SEC website is 0001159508. As used in this pricing supplement, “we,” “us” or “our” refers to Deutsche Bank AG, including, as the context requires, acting through one of its branches. This pricing supplement, together with the documents listed above, contains the terms of the notes and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in this pricing supplement and in “Risk Factors” in the accompanying product supplement, prospectus supplement and prospectus, as the notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before deciding to invest in the notes.

**You may revoke your offer to purchase the notes at any time prior to the time at which we accept such offer by notifying the applicable agent. We reserve the right to change the terms of, or reject any offer to purchase, the**

**notes prior to their issuance. We will notify you in the event of any changes to the terms of the notes and you will be asked to accept such changes in connection with your purchase of any notes. You may choose to reject such changes, in which case we may reject your offer to purchase the notes.**

**Hypothetical Examples**

The following table illustrates a range of hypothetical payments at maturity on the notes. The table and the hypothetical examples below assume a Maximum Return on the notes of 22.40% and reflect the Upside Leverage Factor of 2.00. The actual Initial Level and Maximum Return will be determined on the Trade Date. The table and hypothetical examples set forth below are for illustrative purposes only. The actual return applicable to a purchaser of the notes will be based on the Underlying Return, determined using the closing levels of the Underlying on the specified Averaging Dates. The numbers appearing in the table and examples below may have been rounded for ease of analysis. You should consider carefully whether the notes are suitable to your investment goals.

<i>Hypothetical Underlying Return</i> (%)	<i>Hypothetical Return on the Notes</i> (%)	<i>Hypothetical Payment at Maturity</i> (\$)
100.00%	22.40%	\$1,224.00
90.00%	22.40%	\$1,224.00
80.00%	22.40%	\$1,224.00
70.00%	22.40%	\$1,224.00
60.00%	22.40%	\$1,224.00
50.00%	22.40%	\$1,224.00
40.00%	22.40%	\$1,224.00
30.00%	22.40%	\$1,224.00
20.00%	22.40%	\$1,224.00
<b>11.20%</b>	<b>22.40%</b>	<b>\$1,224.00</b>
10.00%	20.00%	\$1,200.00
5.00%	10.00%	\$1,100.00
<b>0.00%</b>	<b>0.00%</b>	<b>\$1,000.00</b>
-5.00%	-5.00%	\$950.00
-10.00%	-10.00%	\$900.00
-20.00%	-20.00%	\$800.00
-30.00%	-30.00%	\$700.00
-40.00%	-40.00%	\$600.00
-50.00%	-50.00%	\$500.00
-60.00%	-60.00%	\$400.00
-70.00%	-70.00%	\$300.00
-80.00%	-80.00%	\$200.00
-90.00%	-90.00%	\$100.00
-100.00%	-100.00%	\$0.00

### Hypothetical Examples of Amounts Payable at Maturity

The following hypothetical examples illustrate how the payments on the notes at maturity set forth in the table above are calculated.

**Example 1: The Final Level is greater than the Initial Level, resulting in an Underlying Return of 30.00%.**

Because the Final Level is greater than the Initial Level and the product of the Underlying Return of 30.00% and the Upside Leverage Factor is greater than the Maximum Return, the investor receives the Maximum Return on the notes. Accordingly, the investor receives a Payment at Maturity of \$1,224.00 per \$1,000 Face Amount of notes, calculated as follows:

$\$1,000 + (\$1,000 \times \text{the lesser of (i) Underlying Return} \times \text{Upside Leverage Factor and (ii) Maximum Return}$

$$\$1,000 + (\$1,000 \times 22.40\%) = \$1,224.00$$

**Example 2: The Final Level is greater than the Initial Level, resulting in an Underlying Return of 5.00%.**

Because the Final Level is greater than the Initial Level and the product of the Underlying Return of 5.00% and the Upside Leverage Factor is less than the Maximum Return, the investor receives a Payment at Maturity of \$1,100.00 per \$1,000 Face Amount of notes, calculated as follows:

$\$1,000 + (\$1,000 \times \text{the lesser of (i) Underlying Return} \times \text{Upside Leverage Factor and (ii) Maximum Return})$

$$\$1,000 + (\$1,000 \times 5.00\% \times 2.00) = \$1,100.00$$

**Example 3: The Final Level is equal to the Initial Level, resulting in an Underlying Return of 0.00%.** Because the Final Level is equal to the Initial Level, the investor receives a Payment at Maturity of \$1,000.00 per \$1,000 Face Amount of notes.

**Example 4: The Final Level is less than the Initial Level, resulting in an Underlying Return of -40.00%.** Because the Final Level is less than the Initial Level, the Underlying Return is negative and the investor receives a Payment at Maturity of \$600.00 per \$1,000 Face Amount of notes, calculated as follows:

$\$1,000 + (\$1,000 \times \text{Underlying Return})$

$\$1,000 + (\$1,000 \times -40.00\%) = \$600.00$

### Selected Purchase Considerations

**CAPPED APPRECIATION POTENTIAL** — The notes provide the opportunity to enhance returns by *multiplying* a positive Underlying Return by the Upside Leverage Factor of 2.00, subject to the Maximum Return on the notes of 22.40%, resulting in a maximum Payment at Maturity of \$1,224.00 per \$1,000 Face Amount of notes. The actual Maximum Return on the notes will be determined on the Trade Date and will not be less than 22.40%. **Any payment on the notes is subject to our ability to satisfy our obligations as they become due.**

**FULL DOWNSIDE EXPOSURE** — If the Final Level is less than the Initial Level, for each \$1,000 Face Amount of notes, you will lose 1.00% of the Face Amount for every 1.00% by which the Final Level is less than the Initial Level. In this circumstance, you will lose some or all of your investment in the notes.

**RETURN LINKED TO THE PERFORMANCE OF THE PHLX Semiconductor Sector Index<sup>sm</sup>** — The return on the notes, which may be positive, zero or negative, is linked to the performance of the PHLX Semiconductor Sector Index<sup>sm</sup> as described herein. The PHLX Semiconductor Sector Index<sup>sm</sup> is a modified capitalization-weighted index that is designed to track the performance of a set of companies that are engaged in the design, distribution, manufacture and sale of semiconductors. The PHLX Semiconductor Sector Index<sup>sm</sup> is calculated, maintained and published by NASDAQ OMX (the “**Index Sponsor**”). *This is only a summary of the PHLX Semiconductor Sector Index<sup>sm</sup>. For more information on the PHLX Semiconductor Sector Index<sup>sm</sup>, including information concerning its composition, calculation methodology and adjustment policy, please see the section entitled “The PHLX Semiconductor Sector Index<sup>sm</sup>” in this pricing supplement.*

**TAX CONSEQUENCES** — In the opinion of our special tax counsel, Davis Polk & Wardwell LLP, which is based on prevailing market conditions, it is more likely than not that the notes will be treated for U.S. federal income tax purposes as prepaid financial contracts that are not debt. Generally, if this treatment is respected, (i) you should not recognize taxable income or loss prior to the maturity or other taxable disposition of your notes and (ii) the gain or

loss on your notes should be capital gain or loss and should be long-term capital gain or loss if you have held the notes for more than one year. The Internal Revenue Service (the “**IRS**”) or a court might not agree with this treatment, however, in which case the timing and character of income or loss on your notes could be materially and adversely affected.

In 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of “prepaid forward contracts” and similar instruments. The notice focuses in particular on whether beneficial owners of these instruments should be required 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; the degree, if any, to which income (including any mandated accruals) realized by non-U.S. persons should be subject to withholding tax; and whether these instruments are or should be subject to the “constructive ownership” regime, which very generally can operate to recharacterize certain long-term capital gain as ordinary income and impose a notional interest charge. 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.

Withholding under legislation commonly referred to as “FATCA” might (if the notes were recharacterized as debt instruments) apply to amounts treated as interest paid with respect to the notes. Notwithstanding anything to the contrary in the section of the accompanying product supplement entitled “U.S. Federal Income Tax Consequences,” under a recent IRS notice, withholding under FATCA will not apply to payments of gross proceeds (other than any amount treated as interest) of a taxable disposition, including redemption at maturity, of the notes. You should consult your tax adviser regarding the potential application of FATCA to the notes.

Section 871(m) of the Code and Treasury regulations promulgated thereunder (“**Section 871(m)**”) generally impose a 30% withholding tax (unless an income tax treaty applies) on dividend equivalents paid or deemed paid to non-U.S. holders with respect to certain financial instruments linked to U.S. equities or indices that include U.S. equities. Section 871(m) provides certain exceptions to this withholding regime, including for instruments linked to certain broad-based indices that meet requirements set forth in the applicable Treasury regulations (such as an index, a “**Qualified Index**”). Additionally, the applicable regulations exclude from the scope of Section 871(m) instruments issued in 2017 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 (each an “**Underlying Security**”). Based on certain determinations made by us, we expect that Section 871(m) will not apply to the notes with regard to non-U.S. holders. Our determination is not binding on the IRS, and the IRS may disagree with this determination. Section 871(m) is complex and its application may depend on your particular circumstances, including whether you enter into other transactions with respect to an Underlying Security. If necessary, further information regarding the potential application of Section 871(m) will be provided in the pricing supplement for the notes. You should consult your tax adviser regarding the potential application of Section 871(m) to the notes.

You should review carefully the section of the accompanying product supplement entitled “U.S. Federal Income Tax Consequences.” The preceding discussion, when read in combination with that section, constitutes the full opinion of our special tax counsel regarding the material U.S. federal income tax consequences of owning and disposing of the notes.

Under current law, the United Kingdom will not impose withholding tax on payments made with respect to the notes.

For a discussion of certain German tax considerations relating to the notes, you should refer to the section in the accompanying prospectus supplement entitled “Taxation by Germany of Non-Resident Holders.”

**You should consult your tax adviser regarding the U.S. federal tax consequences of an investment in the notes (including possible alternative treatments and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.**

### **Selected Risk Considerations**

An investment in the notes involves significant risks. Investing in the notes is not equivalent to investing directly in the stocks composing the Underlying. In addition to these selected risk considerations, you should review the “Risk Factors” sections of the accompanying product supplement, prospectus supplement and prospectus.



**YOUR INVESTMENT IN THE NOTES MAY RESULT IN A LOSS** — The notes do not guarantee any return of your investment. The return on the notes at maturity is linked to the performance of the Underlying and will depend on whether, and the extent to which, the Underlying Return is positive, zero or negative. If the Final Level is less than the Initial Level, for each \$1,000 Face Amount of notes, you will lose 1.00% of the Face Amount for every 1.00% by which the Final Level is less than the Initial Level. In this circumstance, you will lose some or all of your investment at maturity. **Any payment on the notes is subject to our ability to satisfy our obligations as they become due.**

**THE RETURN ON THE NOTES IS LIMITED** — If the Final Level is greater than the Initial Level, for each \$1,000 Face Amount of notes, you will receive at maturity the Face Amount *plus* an additional amount that will not exceed the *product* of the Maximum Return of 22.40% and \$1,000 Face Amount of notes. Consequently, assuming the Maximum Return is determined on the Trade Date to be 22.40%, the maximum Payment at Maturity will be \$1,224.00 per \$1,000 Face Amount of notes, regardless of any increase in the level of the Underlying, which may be significant.

**THE NOTES DO NOT PAY ANY COUPONS** — Unlike ordinary debt securities, the notes do not pay any coupons and do not guarantee any return of your investment at maturity.

**THE NOTES ARE SUBJECT TO THE CREDIT OF DEUTSCHE BANK AG** — The notes are senior unsecured obligations of Deutsche Bank AG and are not, either directly or indirectly, an obligation of any third party. Any payment(s) to be made on the notes depends on the ability of Deutsche Bank AG to satisfy its obligations as they become due. An actual or anticipated downgrade in Deutsche Bank AG's credit rating or increase in the credit spreads charged by the market for taking Deutsche Bank AG's credit risk will likely have an adverse effect on the value of the notes. As a result, the actual and perceived creditworthiness of Deutsche Bank AG will affect the value of the notes and, in the event Deutsche Bank AG were to default on its obligations or become subject to a Resolution Measure, you

might not receive any amount(s) owed to you under the terms of the notes and you could lose your entire investment.

**The Notes May Be Written Down, Be Converted Into Ordinary Shares or Other Instruments of Ownership or Become Subject to Other Resolution Measures. You May Lose Some or All of Your Investment If Any Such Measure Becomes Applicable to US** — Pursuant to the SRM Regulation, the Resolution Act and other applicable rules and regulations described above under “Resolution Measures and Deemed Agreement,” the notes are subject to the powers exercised by the competent resolution authority to impose Resolution Measures on us, which may include: writing down, including to zero, any claim for payment on the notes; converting the notes into ordinary shares of (i) the Issuer, (ii) any group entity or (iii) any bridge bank or other instruments of ownership of such entities qualifying as common equity tier 1 capital; or applying any other resolution measure including, but not limited to, transferring the notes to another entity, amending, modifying or varying the terms and conditions of the notes or cancelling the notes. The competent resolution authority may apply Resolution Measures individually or in any combination.

The German law on the mechanism for the resolution of banks of November 2, 2015 (*Abwicklungsmechanismengesetz*, or the “**Resolution Mechanism Act**”) provides that, in a German insolvency proceeding of the Issuer, certain specifically defined senior unsecured debt instruments would rank junior to, without constituting subordinated debt, all other outstanding unsecured unsubordinated obligations of the Issuer and be satisfied only if all such other senior unsecured obligations of the Issuer have been paid in full. This prioritization would also be given effect if Resolution Measures are imposed on the Issuer, so that obligations under debt instruments that rank junior in insolvency as described above would be written down or converted into common equity tier 1 instruments *before* any other senior unsecured obligations of the Issuer are written down or converted. A large portion of our liabilities consist of senior unsecured obligations that either fall outside the statutory definition of debt instruments that rank junior to other senior unsecured obligations according to the Resolution Mechanism Act or are expressly exempted from such definition.

Among those unsecured unsubordinated obligations that are expressly exempted are money market instruments and senior unsecured debt instruments whose terms provide that (i) the repayment or the amount of the repayment depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued or is settled in a way other than by monetary payment, or (ii) the payment of interest or the amount of the interest payments depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued unless the payment of interest or the amount of the interest payments solely depends on a fixed or floating reference interest rate and is settled by monetary payment. This order of priority introduced by the Resolution Mechanism Act would apply in German insolvency proceedings instituted, or when Resolution Measures are imposed, on or after January 1, 2017 with effect for debt instruments of the Issuer outstanding at that time. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the competent regulatory authority or court would determine which of our senior debt securities issued under the prospectus have the terms described in clauses (i) or (ii) above, referred to herein as the “**Structured Debt Securities**,” and which do not, referred to herein as the “**Non-Structured Debt Securities**.” We expect the notes offered herein to be classified as Structured Debt Securities, but the competent regulatory authority or court may classify the notes differently. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the Structured Debt Securities are expected to be among the unsecured unsubordinated obligations that would bear losses after the Non-Structured Debt Securities as described above. **Nevertheless, you may lose some or all of your investment in the notes if a Resolution Measure becomes**

**applicable to us.** Imposition of a Resolution Measure would likely occur if we become, or are deemed by the competent supervisory authority to have become, “non-viable” (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. The Bank Recovery and Resolution Directive and the Resolution Act are intended to eliminate the need for public support of troubled banks, and you should be aware that public support, if any, would only potentially be used by the competent supervisory authority as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution tools, including the bail-in tool.

By acquiring the notes, you would have no claim or other right against us arising out of any Resolution Measure and we would have no obligation to make payments under the notes following the imposition of a Resolution Measure. In particular, the imposition of any Resolution Measure will not constitute a default or an event of default under the notes, under the Indenture or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act. Furthermore, because the notes are subject to any Resolution Measure, secondary market trading in

the notes may not follow the trading behavior associated with similar types of securities issued by other financial institutions which may be or have been subject to a Resolution Measure.

In addition, by your acquisition of the notes, you waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the indenture agents for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the notes. **Accordingly, you may have limited or circumscribed rights to challenge any decision of the competent resolution authority to impose any Resolution Measure.**

**THE ISSUER'S ESTIMATED VALUE OF THE NOTES ON THE TRADE DATE WILL BE LESS THAN THE ISSUE PRICE OF THE NOTES** — The Issuer's estimated value of the notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the notes. The difference between the Issue Price and the Issuer's estimated value of the notes on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the notes through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge. The Issuer's estimated value of the notes is determined by reference to an internal funding rate and our pricing models. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the notes, reduces the economic terms of the notes to you and is expected to adversely affect the price at which you may be able to sell the notes in any secondary market. In addition, our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. If at any time a third party dealer were to quote a price to purchase your notes or otherwise value your notes, that price or value may differ materially from the estimated value of the notes determined by reference to our internal funding rate and pricing models. This difference is due to, among other things, any difference in funding rates, pricing models or assumptions used by any dealer who may purchase the notes in the secondary market.

**INVESTING IN THE NOTES IS NOT THE SAME AS INVESTING IN THE STOCKS COMPOSING THE UNDERLYING** — The return on the notes may not reflect the return you would have realized if you had directly invested in the stocks composing the Underlying. For instance, you will not receive more than the Maximum Return regardless of any potential increase in the level of the Underlying, which could be significant, even though you will be exposed to any decline in the level of the Underlying at maturity.

**IF THE LEVEL OF THE UNDERLYING CHANGES, THE VALUE OF YOUR NOTES MAY NOT CHANGE IN THE SAME MANNER** — Your notes may trade quite differently from the level of the Underlying. Changes in the level of the Underlying may not result in comparable changes in the value of your notes.

**NO DIVIDEND PAYMENTS OR VOTING RIGHTS** — As a holder of the notes, you will not have any voting rights or rights to receive cash dividends or other distributions or other rights that holders of the stocks composing the Underlying would have.

**THE UNDERLYING REFLECTS THE PRICE RETURN OF THE STOCKS COMPOSING THE UNDERLYING, NOT THEIR TOTAL RETURN INCLUDING ALL DIVIDENDS AND OTHER DISTRIBUTIONS** —

The Underlying reflects the changes in the market prices of the stocks composing the Underlying. The Underlying is not, however, a “total return” index, which, in addition to reflecting those price returns, would also reflect the reinvestment of all dividends and other distributions paid on the stocks composing the Underlying.

**THE SPONSOR OF THE UNDERLYING MAY ADJUST THE UNDERLYING IN WAYS THAT AFFECT THE LEVEL OF THE UNDERLYING AND HAS NO OBLIGATION TO CONSIDER YOUR INTERESTS** —

The Index Sponsor is responsible for calculating and maintaining the Underlying. The Index Sponsor can add, delete or substitute the Underlying components or make other methodological changes that could change the level of the Underlying. You should realize that the changing of Underlying components may affect the Underlying, as a newly added component may perform significantly better or worse than the component it replaces. Additionally, the Index Sponsor may alter, discontinue or suspend calculation or dissemination of the Underlying. Any of these actions could adversely affect the value of, and your return on, the notes. The Index Sponsor has no obligation to consider your interests in calculating or revising the Underlying.

**THE EQUITY SECURITIES INCLUDED IN THE UNDERLYING ARE SUBJECT TO RISKS ASSOCIATED WITH THE SEMICONDUCTOR INDUSTRY** —

All or substantially all of the equity securities included in the Underlying are issued

by companies whose primary line of business is directly associated with the design, distribution, manufacture and sale of semiconductors. The prices of stocks of companies that are heavily involved in the semiconductor industry are particularly vulnerable to rapid changes in technology product cycles, rapid product obsolescence, government regulation, changes in the prices and availability of raw materials such as water, silicon, electricity and chemicals, and competition in the semiconductor industry, both domestically and internationally, including competition from foreign competitors with lower production costs. Such companies may also be heavily dependent on patent and intellectual property rights, the loss or impairment of which may adversely affect profitability. Additionally, such companies may face competition for the services of, and difficulties in employing and retaining, qualified personnel. These factors, or the absence of such factors, could cause a downturn in the semiconductor industry and could cause the value of some or all of the securities included in the Underlying, and thus, the level of the Underlying, to decline during the term of the notes.

**PAST PERFORMANCE OF THE UNDERLYING IS NO GUIDE TO FUTURE PERFORMANCE** — The actual performance of the Underlying over the term of the notes may bear little relation to the historical closing levels of the Underlying and/or the hypothetical examples set forth elsewhere in this pricing supplement. We cannot predict the future performance of the Underlying or whether the performance of the Underlying will result in the return of any of your investment.

**ASSUMING NO CHANGES IN MARKET CONDITIONS AND OTHER RELEVANT FACTORS, THE PRICE YOU MAY RECEIVE FOR YOUR NOTES IN SECONDARY MARKET TRANSACTIONS WOULD GENERALLY BE LOWER THAN BOTH THE ISSUE PRICE AND THE ISSUER'S ESTIMATED VALUE OF THE NOTES ON THE TRADE DATE** — While the payment(s) on the notes described in this pricing supplement is based on the full Face Amount of notes, the Issuer's estimated value of the notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the notes. The Issuer's estimated value of the notes on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your notes in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the notes from you in secondary market transactions, if at all, would generally be lower than both the Issue Price and the Issuer's estimated value of the notes on the Trade Date. Our purchase price, if any, in secondary market transactions would be based on the estimated value of the notes determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the notes and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our notes for use on customer account statements would generally be determined on the same basis. However, during the period of approximately six months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the notes on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

In addition to the factors discussed above, the value of the notes and our purchase price in secondary market transactions after the Trade Date, if any, will vary based on many economic and market factors, including our creditworthiness, and cannot be predicted with accuracy. These changes may adversely affect the value of your notes, including the price you may receive in any secondary market transactions. Any sale prior to the Maturity Date could result in a substantial loss to you. The notes are not designed to be short-term trading instruments. Accordingly, you

should be able and willing to hold your notes to maturity.

**THE NOTES WILL NOT BE LISTED AND THERE WILL LIKELY BE LIMITED LIQUIDITY** — The notes will not be listed on any securities exchange. There may be little or no secondary market for the notes. We or our affiliates intend to act as market makers for the notes but are not required to do so and may cease such market making activities at any time. Even if there is a secondary market, it may not provide enough liquidity to allow you to sell the notes when you wish to do so or at a price advantageous to you. Because we do not expect other dealers to make a secondary market for the notes, the price at which you may be able to sell your notes is likely to depend on the price, if any, at which we or our affiliates are willing to buy the notes. If, at any time, we or our affiliates do not act as market makers, it is likely that there would be little or no secondary market in the notes. If you have to sell your notes prior to maturity, you may not be able to do so or you may have to sell them at a substantial loss, even in cases where the level of the Underlying has increased since the Trade Date.

**MANY ECONOMIC AND MARKET FACTORS WILL AFFECT THE VALUE OF THE NOTES** — While we expect that, generally, the level of the Underlying will affect the value of the notes more than any other single factor, the value of the notes

prior to maturity will also be affected by a number of other factors that may either offset or magnify each other, including:

the expected volatility of the Underlying;

the time remaining to the maturity of the notes;

the market prices and dividend rates of the stocks composing the Underlying;

the composition of the Underlying;

interest rates and yields in the markets generally;

geopolitical conditions and economic, financial, political, regulatory or judicial events that affect the Underlying or the markets generally;

supply and demand for the notes; and

our creditworthiness, including actual or anticipated downgrades in our credit ratings.

During the term of the notes, it is possible that their value may decline significantly due to the factors described above even if the level of the Underlying remains unchanged from the Initial Level, and any sale prior to the Maturity Date could result in a substantial loss to you. You must hold the notes to maturity to receive the stated payout from the Issuer.

**TRADING AND OTHER TRANSACTIONS BY US, JPMORGAN CHASE & CO. OR OUR OR ITS AFFILIATES IN THE EQUITY AND EQUITY DERIVATIVE MARKETS MAY IMPAIR THE VALUE OF THE NOTES** — We or our affiliates expect to hedge our exposure from the notes by entering into equity and equity derivative transactions, such as over-the-counter options, futures or exchange-traded instruments. We, JPMorgan Chase & Co. or our or its affiliates may also engage in trading in instruments linked or related to the Underlying on a regular basis as part of our or their general broker-dealer and other businesses, for proprietary accounts, for other accounts under management or to facilitate transactions for customers, including block transactions. Such trading and hedging activities may adversely affect the level of the Underlying and, therefore, make it less likely that you will receive a positive return on your investment in the notes. It is possible that we, JPMorgan Chase & Co. or our or its affiliates could receive substantial returns from these hedging and trading activities while the value of the notes declines. We, JPMorgan Chase & Co. or our or its affiliates may also issue or underwrite other securities or financial or derivative instruments with returns linked or related to the Underlying. To the extent that we, JPMorgan Chase &



Co. or our or its affiliates serve as issuer, agent or underwriter for such securities or financial or derivative instruments, our, JPMorgan Chase & Co.'s or our or its affiliates' interests with respect to such products may be adverse to those of the holders of the notes. Introducing competing products into the marketplace in this manner could adversely affect the level of the Underlying and the value of the notes. Any of the foregoing activities described in this paragraph may reflect trading strategies that differ from, or are in direct opposition to, investors' trading and investment strategies related to the notes.

**WE, JPMORGAN CHASE & CO. OR OUR OR ITS AFFILIATES MAY PUBLISH RESEARCH, EXPRESS OPINIONS OR PROVIDE RECOMMENDATIONS THAT ARE INCONSISTENT WITH INVESTING IN OR HOLDING THE NOTES. ANY SUCH RESEARCH, OPINIONS OR RECOMMENDATIONS COULD ADVERSELY AFFECT THE LEVEL OF THE UNDERLYING AND THE VALUE OF THE NOTES** — We, JPMorgan Chase & Co. or our or its affiliates may publish research from time to time on financial markets and other matters that could adversely affect the level of the Underlying and the value of the notes, or express opinions or provide recommendations that are inconsistent with purchasing or holding the notes. Any research, opinions or recommendations expressed by us, JPMorgan Chase & Co. or our or its affiliates may not be consistent with each other and may be modified from time to time without notice. You should make your own independent investigation of the merits of investing in the notes and the Underlying.

**POTENTIAL CONFLICTS OF INTEREST** — We and our affiliates play a variety of roles in connection with the issuance of the notes, including acting as calculation agent, hedging our obligations under the notes and determining the Issuer's estimated value of the notes on the Trade Date and the price, if any, at which we or our affiliates would be willing to purchase the notes from you in secondary market transactions. In performing these roles, our economic interests and those of our affiliates are potentially adverse to your interests as an investor in the notes. The calculation agent will determine, among other things, all values, prices and levels required to be determined for the purposes of the notes on any relevant date or time. The calculation agent will also be responsible for determining

whether a market disruption event has occurred. Any determination by the calculation agent could adversely affect the return on the notes.

**THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE NOTES ARE UNCERTAIN** — There is no direct legal authority regarding the proper U.S. federal income tax treatment of the notes, and we do not plan to request a ruling from the IRS. Consequently, significant aspects of the tax treatment of the notes are uncertain, and the IRS or a court might not agree with the treatment of the notes as prepaid financial contracts that are not debt. If the IRS were successful in asserting an alternative treatment for the notes, the tax consequences of ownership and disposition of the notes could be materially and adversely affected.

Even if the treatment of the notes as prepaid financial contracts is respected, purchasing a note could be treated as entering into a “constructive ownership transaction.” In that case, all or a portion of any long-term capital gain you would otherwise recognize on the taxable disposition of the note would be recharacterized as ordinary income to the extent such gain exceeded the “net underlying long-term capital gain,” and a notional interest charge would apply with respect to the deemed tax liability that would have been incurred if such income had accrued at a constant rate over the period you held the note.

As described above under “Tax Consequences,” in 2007 the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of “prepaid forward contracts” and similar instruments. 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. You should review carefully the section of the accompanying product supplement entitled “U.S. Federal Income Tax Consequences,” and consult your tax adviser regarding the U.S. federal tax consequences of an investment in the notes (including possible alternative treatments, the potential application of the “constructive ownership” regime and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

### **Use of Proceeds and Hedging**

Part of the net proceeds we receive from the sale of the notes will be used in connection with hedging our obligations under the notes through one or more of our affiliates. The hedging or trading activities of our affiliates on or prior to the Trade Date or an Averaging Date could adversely affect the level of the Underlying and, as a result, could decrease the amount you may receive on the notes at maturity.

## The PHLX Semiconductor Sector Index<sup>Sm</sup>

We have derived all information contained in this pricing supplement regarding the PHLX Semiconductor Sector<sup>SM</sup> Index (the “**PHLX Index**”), including, without limitation, information concerning its make-up, method of calculation and changes in its components, from publicly available information. We have not participated in the preparation of, or verified, such information. Such information reflects the policies of, and is subject to change by, NASDAQ OMX (“**OMX**”). The PHLX Index is calculated, maintained and published by OMX. OMX has no obligation to continue to publish, and may discontinue or suspend the publication of, the PHLX Index at any time. The PHLX Index is reported by Bloomberg L.P. under the ticker symbol “SOX.”

The PHLX Index is a modified capitalization-weighted index that is designed to track the performance of a set of companies that are engaged in the design, distribution, manufacture and sale of semiconductors. The level of the PHLX Index equals the aggregate value of the share weights for each of the securities included in the PHLX Index (the “**Index Weights**”) *multiplied by* each such security’s last sale price on its primary U.S. listing market and *divided by* the divisor of the PHLX Index (adjustments to the divisor are described below.) The divisor serves the purpose of scaling the level of the PHLX Index to a lower order of magnitude, which is more desirable for reporting purposes. The PHLX Index was initially calculated on December 1, 1993 at a base level of 100.00, as adjusted.

The level of the PHLX Index is calculated in accordance with the following formula:

### Aggregate Adjusted Market Value

Divisor

The PHLX Index is a price return index, which is ordinarily calculated without regard to cash dividends on securities included in the PHLX Index, but does reflect extraordinary cash dividends.

### **Index Eligibility**

Only specific types of securities are eligible for inclusion in the PHLX Index, including common stock, ordinary shares, american depository receipts, and shares of beneficial interest or limited partnership interests. Only one class of security is eligible for inclusion per issuer; if an issuer has multiple securities, the security with the largest market capitalization will be selected for possible inclusion. In addition, to be eligible for inclusion in the PHLX Index, a security must:

· be listed on The NASDAQ Stock Market (“**NASDAQ**”), the New York Stock Exchange (“**NYSE**”) or NYSE MKT;

· be issued by a company whose primary business is involved in the design, distribution, manufacture and sale of semiconductors as classified under the Industry Classification Benchmark (ICB) code 9576 published by FTSE International Limited;

· have a minimum market capitalization of at least \$100 million;

· have traded at least 1.5 million shares in each of the last six months;

· have listed options on a recognized options market in the U.S. (or be eligible for listed-options trading on such a market);

· be issued by a company that is not currently in bankruptcy proceedings;

· be issued by a company that has not entered into a definitive agreement (or other arrangement) that would likely result in the security no longer being eligible for inclusion;

· be issued by a company that has currently withdrawn an audit opinion from its annual financial statements; and

· have “seasoned” on a recognized market for at least 3 months.

The securities included in the PHLX Index are evaluated annually in September, at which time the above eligibility criteria are applied using market data as of the end of July. Eligible securities that satisfy the criteria are then ranked by market capitalization. The top 30 securities ranked by market capitalization are included in the PHLX Index. Security additions and deletions are made effective after the close of trading on the third Friday in September.

Additionally, if, at any time other than during such annual review, a security included in the PHLX Index is determined to have become ineligible for continued inclusion in the PHLX Index, or at the end of January, April, July or October does not have a last sale price of \$3.00, such security will be replaced with the largest market capitalization security not currently included in the PHLX Index that satisfies the above eligibility criteria as well as the \$3.00 last sale price. Ordinarily, a security will be removed from the PHLX Index at its last sale price. If, however, at the time of its removal a security is halted from trading on its primary U.S. listing market and an official closing price cannot readily be determined, then such security may, in OMX's discretion, be removed at a zero price. The zero price will be applied to such security after the close of the market but prior to the time that the official closing level of the PHLX Index is disseminated.

### **Index Maintenance**

Changes in the level of the PHLX Index and/or the Index Weights that are driven by corporate events, such as stock dividends, stock splits and certain spin-offs and rights issuances, are adjusted on the ex-date. If the change in total shares outstanding arising from other corporate actions is greater than or equal to 10%, the change is made as soon as practicable. Otherwise, if the change in total shares outstanding is less than 10%, then all such changes are accumulated through the end of February, May, August and November and made effective at one time on a quarterly basis after the close of trading on the third Friday in March, June, September and December, respectively. The Index Weights are adjusted by the same percentage amount by which the total shares outstanding have changed.

A special cash dividend announced by the listing exchange will result in an adjustment to the last sale price of a security included in the PHLX Index prior to market open on the ex-date for the special amount distributed. A special dividend may also be referred to as extra, extraordinary, non-recurring, one-time, unusual, etc.

Ordinarily, whenever there is a change in Index Weights, a change in a security included in the PHLX Index or a change in the price of such a security due to spin-offs, rights issuances or special cash dividends as mentioned above, the divisor is adjusted to ensure that there is no discontinuity in the level of the PHLX Index that might otherwise be caused by any such change. All changes are announced in advance and are reflected in the PHLX Index prior to the opening of markets on the effective date.

### **Index Rebalancing**

The PHLX Index employs a modified market capitalization weighting methodology. On a quarterly basis, the PHLX Index is rebalanced such that (1) the maximum weight of any security included in the PHLX Index does not exceed 8% and (2) no more than five securities are at that cap. The excess weight of any capped security is distributed proportionally across the remaining securities included in the PHLX Index. If, after redistribution, any of the five highest-ranked securities included in the PHLX Index are weighted below 8%, those securities are not capped. Next,

any remaining securities included in the PHLX Index in excess of 4% are capped at 4% and the excess weight is redistributed proportionally across the remaining securities included in the PHLX Index. The process is repeated, if necessary, to derive the final weights.

The modified market capitalization weighting methodology is applied to the capitalization of each security included in the PHLX Index, using the last sale price of the security at the close of trading on the last trading day in February, May, August and November. Index Weights are then calculated by *multiplying* the weight of the security derived above by the new level of the PHLX Index and *dividing* the modified market capitalization for each security included in the PHLX Index by its corresponding last sale price. The changes become effective after trading on the third Friday in March, June, September and December.

OMX may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure the integrity of the PHLX Index.

## **Historical Information**

The following graph sets forth the historical performance of the PHLX Semiconductor Sector Index<sup>SM</sup> based on its daily closing levels from July 7, 2012 through July 7, 2017. The closing level of the Underlying on July 7, 2017 was 1,054.902. We obtained the historical closing levels of the Underlying below from Bloomberg L.P. and we have not participated in the preparation of, or verified, such information.

**The historical closing levels of the Underlying should not be taken as an indication of future performance and no assurance can be given as to the closing level of the Underlying on any of the Averaging Dates. We cannot give you assurance that the performance of the Underlying will result in the return of any of your initial investment.**

## **Supplemental Plan of Distribution**

JPMorgan Chase Bank, N.A. and JPMS LLC or one of its affiliates will act as placement agents for the notes. The placement agents will receive a fee from the Issuer that will not exceed \$10.00 per \$1,000 Face Amount of notes, but will forgo any fees for sales to certain fiduciary accounts. See “Plan of Distribution (Conflicts of Interest)” in the accompanying product supplement.