Deutsche Bank AG Senior Notes, Series A

We, Deutsche Bank AG, may offer and sell our senior notes (the "notes") at one or more times. The specific terms of any notes that we offer and sell will be included in a term sheet, pricing supplement, underlying supplement and/or product supplement, as the case may be. We refer to such term sheets, pricing supplements, underlying supplements and product supplements generally as "pricing supplements."

The notes will have the following general terms:

- The notes may bear interest at any time at either a fixed rate or a floating rate that varies during the term of the relevant notes, which, in either case, may be zero. Floating rates will be based on one of the base rates specified herein or another base rate as specified in the applicable pricing supplement.
- The notes will pay interest, if any, on the dates stated in the applicable pricing supplement.
- The applicable pricing supplement will specify whether the notes will be denominated in U.S. dollars or some other currency.
- The notes will be held in global, book-entry form by The Depository Trust Company, unless the pricing supplement provides otherwise.

The pricing supplement may also specify that the notes will have any additional terms, including the following:

- The notes may be optionally or mandatorily exchangeable for securities of ours or entities that are or are not affiliated with
 us, a basket or baskets of those securities, other property, or any combination of, or the cash value of, such securities or
 other property.
- The amount of principal or interest may be determined by reference to one or more currencies, commodities or securities of
 ours or entities that are or are not affiliated with us; or interest rates, or intangibles, articles, goods or any other property; or
 any other financial or economic or other measures or instruments, including the occurrence or non-occurrence of any events
 or circumstances; and/or indices or baskets of any of these items, including baskets of indices.

Investing in the notes involves risks. See "Risk Factors" beginning on page PS-5 of this prospectus supplement as well as the applicable pricing supplement and the documents incorporated herein by reference for a discussion of risks relating to each particular issuance of notes.

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 prospectus supplement, the accompanying prospectus or any related pricing supplement. Any representation to the contrary is a criminal offense.

The notes will constitute our unsecured and unsubordinated obligations and shall rank pari passu among themselves and pari passu with all of our other unsecured and unsubordinated obligations, subject, however, to statutory priorities conferred upon certain unsecured and unsubordinated obligations in the event of any Resolution Measures (as further described in the accompanying prospectus) imposed on us or in the event of our dissolution, liquidation, insolvency or composition, or if other proceedings are opened for the avoidance of the insolvency of, or against, us; in accordance with Section 46f(5) of the German Banking Act (*Kreditwesengesetz*), our obligations under the notes will rank in priority to our senior non-preferred obligations under any of our debt instruments (*Schuldtitel*) within the meaning of Section 46f(6) sentence 1 of the German Banking Act (including the senior non-preferred obligations under any such debt instruments that we issued before July 21, 2018 and that are subject to Section 46f(9) of the German Banking Act) or any successor provision.

By acquiring the notes, you will be bound by and will be deemed to consent to the imposition of any Resolution Measure 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 the section "Risk Factors" beginning on page 20 in the accompanying prospectus and the section "Resolution Measures" beginning on page 76 in the accompanying prospectus for more information.

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.

Deutsche Bank Securities Inc. ("DBSI") and Deutsche Bank Trust Company Americas ("DBTCA"), which are our affiliates, have agreed to use reasonable efforts to solicit offers to purchase these notes as our selling agents to the extent either or both is named in the applicable pricing supplement. DBSI may also act on a firm commitment basis, but only if so specified in the applicable pricing supplement. Certain other selling agents to be named in the applicable pricing supplement may also be used to solicit such offers on either a reasonable efforts or firm commitment basis. The agents may also purchase these notes as principal at prices to be agreed upon at the time of sale. The agents may resell any notes they purchase as principal at prevailing market prices, or at other prices, as the agents determine.

Because DBSI is both our affiliate and a member of the Financial Industry Regulatory Authority, Inc. ("FINRA"), each offering of notes by DBSI must be conducted in accordance with the applicable provisions of FINRA Rule 5121. For more information, see the "Plan of Distribution (Conflicts of Interest)" section of this prospectus supplement.

The agents may use this prospectus supplement and the accompanying prospectus, together with any pricing supplements, in connection with offers and sales of the notes in market-making transactions.

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SUMMARY

The following summary describes the notes we are offering under this program in general terms only. You should read the summary together with the more detailed information contained in this prospectus supplement, in the accompanying prospectus and in the applicable pricing supplement. We refer to the notes offered under this prospectus supplement as our "Series A notes" or "notes." We refer to the offering of the Series A notes as our "Series A program."

As used in this prospectus supplement, the "Bank," "we," "our," "us" or "Issuer" refers to Deutsche Bank AG, including, as the context may require, acting through one of its branches.

Issuer	
Notes offered	Senior Notes, Series A
Ranking	The notes will constitute our unsecured and unsubordinated obligations and shall rank <i>pari passu</i> among themselves and <i>pari passu</i> with all of our other unsecured and unsubordinated obligations, subject, however, to statutory priorities conferred upon certain unsecured and unsubordinated obligations in the event of any Resolution Measures (as described in the accompanying prospectus) imposed on us or in the event of our dissolution, liquidation, insolvency or composition, or if other proceedings are opened for the avoidance of the insolvency of, or against, us; in accordance with Section 46f(5) of the German Banking Act (<i>Kreditwesengesetz</i>), our obligations under the notes will rank in priority to our senior non-preferred obligations under any of our debt instruments (<i>Schuldtitel</i>) within the meaning of Section 46f(6) sentence 1 of the German Banking Act (including the senior non-preferred obligations under any such debt instruments that we issued before July 21, 2018 and that are subject to Section 46f(9) of the German Banking Act) or any successor provision.
Resolution Measures	By acquiring the notes, you will be bound by and will be deemed to consent to the imposition of any Resolution Measure by the competent resolution authority, which may include the write down of all, or a portion, of any payment (or delivery of any property) 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 the section "Risk Factors" beginning on page 20 in the accompanying prospectus and the section "Resolution Measures" beginning on page 76 in the accompanying prospectus for more information.
Branches; Office Substitution	We may act directly through our principal office in Frankfurt or through one of our branches, such as our London branch or New York branch, as specified in the applicable pricing supplement. If specified in the applicable pricing supplement, we may, without the consent of the holders or the trustee, designate our head office or another branch of ours (in this paragraph, we refer to each of our head office or any of our branches as an " office ") as substitute for the office through which we have acted to issue such series with the same effect as if such substitute office had been originally named as the office through which we had

	acted to issue such series for all purposes under the
	Indenture (as defined below) and such series.
Interest features	A note will pay interest, if any, on the dates specified in the applicable pricing supplement. A note may bear interest at any time at either a fixed rate or a floating rate that varies during the term of the relevant notes, which, in either case, may be zero.
Linked note features	Payment of principal and/or interest on the notes may be linked to one or more currencies, commodities or securities of ours or entities that are or are not affiliated with us; or interest rates, or intangibles, articles, goods or any other property; or any other financial or economic or other measures or instruments, including the occurrence or non-occurrence of any events or circumstances; and/or indices or baskets of any of these items, including baskets of indices.
Exchangeable note features	The notes may be optionally or mandatorily exchangeable for securities of ours or entities that are or are not affiliated with us, a basket or baskets of those securities, other property, or any combination of, or the cash value of, such securities or other property.
Redemption/repayment features	The notes may be either callable by us or puttable by you, as specified in the applicable pricing supplement.
Currency and denomination	The notes will be issued in U.S. dollars in minimum denominations of \$1,000 unless we specify otherwise in the applicable pricing supplement.
Listing	The notes will not be listed on any securities exchange unless we specify otherwise in the applicable pricing supplement.
Form of notes	The notes will be issued only in global form (<i>i.e.</i> , in book-entry form) registered in the name of The Depository Trust Company, or its nominee, unless otherwise stated in the applicable pricing supplement.
Conflicts of Interest	Because DBSI is both an affiliate of the Bank and a member of FINRA, any distribution of the notes by DBSI must be made in compliance with the applicable provisions of FINRA Rule 5121 regarding a FINRA member firm's distribution of the securities of an affiliate and related conflicts of interest. In accordance with FINRA Rule 5121, DBSI may not make sales in offerings of the notes to any of its discretionary accounts without the prior written approval of the customer. For more information, see the "Plan of Distribution (Conflicts of Interest)" section of this prospectus supplement.
How to reach us	You may contact us at Deutsche Bank AG, Taunusanlage 12, 60325 Frankfurt am Main, Germany, <i>Attention</i> : Investor Relations (telephone: +49–800– 910–8000, email: db.ir@db.com).

RISK FACTORS

For a discussion of the risk factors relating to Deutsche Bank AG and its business, see "Risk Factors" in Part I, Item 3 of our most recent annual report on Form 20-F and our other current and periodic reports filed with the Securities and Exchange Commission that are incorporated by reference into this prospectus supplement.

In addition, you should consider carefully the following discussion of risks, together with the section "Risk Factors" beginning on page 20 in the accompanying prospectus and the risk information contained in the relevant pricing supplement, before you decide that an investment in the notes is suitable for you.

Risks Relating to the Notes Generally

The notes are subject to the credit of Deutsche Bank AG.

The notes will constitute unsecured and unsubordinated obligations of Deutsche Bank AG, ranking in priority to its senior non-preferred obligations, and will not, either directly or indirectly, constitute an obligation of any third party. Any interest payments to be made on the notes and the repayment of principal at maturity depend 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's funding costs and cause the trading price of the notes to decline significantly. Additionally, under many derivative contracts to which Deutsche Bank AG is a party, a downgrade could require it to post additional collateral, lead to terminations of contracts with accompanying payment obligations or give counterparties additional remedies. In the event Deutsche Bank AG were to default on its payment obligations or become subject to a Resolution Measure, you might not receive interest and principal payments.

We may, without consent of the holders or the trustee, designate another office of ours as the issuing office.

If specified in the applicable pricing supplement, we may, without consent of the holders or the trustee, designate our head office or another branch of ours (in this paragraph, we refer to each of our head office or any of our branches as "office") as substitute for the office through which we have acted to issue such series with the same effect as if such substitute office had been originally named as the office through which we had acted to issue such series for all purposes under the Indenture and such series. This means that, with effect from the substitution date, such substitute office will assume all of the obligations of the originally-named office as principal obligor under such series of notes. If such series includes an "Office Substitution" right, as described above and in the Indenture, the applicable pricing supplement may include disclosure about the possible tax consequences of such substitution. If applicable, you should review such disclosure carefully and consult your tax adviser regarding the U.S. federal tax consequences of such substitution, as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Risks Relating to Floating Rate Notes

Regulation, reform and the actual or potential discontinuation of certain "benchmark" rates, including any base rate to which your notes may reference, may adversely affect the value of, return on and trading market for floating rate notes that are based on these benchmarks.

Previously certain interest rates which are deemed to be "benchmark" rates have been the subject of national, international and other regulatory guidance, reform and other actions. This has resulted in regulatory reform and changes to existing benchmarks. Such reform of benchmarks includes the Regulation (EU) 2016/1011 (as amended, the "**EU Benchmarks Regulation**") of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014, and the EU Benchmarks Regulation as it forms part of UK domestic law by virtue of the UK European Union (Withdrawal) Act 2018 (the "**UK Benchmarks Regulation**" and, together with the EU Benchmarks Regulation, the "**Benchmarks Regulations**"), which apply to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark within the European Union (the "**EU**") and the United Kingdom (the "**UK**"), respectively.

Among other things, the Benchmarks Regulations (i) require benchmark administrators to be authorized or registered (or, if non-EU-based or non-UK based, to be subject to an equivalent regime or otherwise recognized or endorsed) and (ii) prevent certain uses by EU and UK supervised entities, as applicable, of benchmarks of administrators that are not authorized or registered (or if non EU-based or UK-based, as applicable, not deemed equivalent or recognized or endorsed).

The Benchmarks Regulations could have a material impact on any floating rate notes, in particular, if the methodology or other terms of the relevant benchmark are changed in order to comply with the requirements of the Benchmarks Regulations. Such changes could, amongst other things, have the effect of reducing, increasing or otherwise affecting the volatility of the published rate or level of the relevant benchmark.

The Financial Conduct Authority of the United Kingdom (the "**FCA**") has indicated through a series of announcements that the continuation of the London Interbank Offered Rate ("**LIBOR**") cannot and will not be guaranteed after 2021. On March 5, 2021, the FCA and ICE Benchmark Administration announced that all LIBOR setting either will cease to be provided by any administrator or will no longer be representative (i) immediately after December 31, 2021 (for all sterling, euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month U.S. dollar settings) and (ii) immediately after June 30, 2023 (for the remaining U.S. dollar settings).

In June 2017, the New York Federal Reserve's Alternative Reference Rates Committee announced the Secured Overnight Financing Rate ("**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 not be the economic equivalent of U.S. dollar LIBOR, there can be no assurance that SOFR will perform in the same way as U.S. dollar LIBOR would have at any time and there is no guarantee that SOFR will be a comparable substitute for U.S. dollar LIBOR. Any failure of SOFR to gain market acceptance could adversely affect the value of the notes linked to SOFR. The administrator of SOFR may make changes that could change the value of SOFR or discontinue SOFR and has no obligation to consider your interests in doing so.

In the future, "benchmark" rates, including any base rate to which the notes may reference could be subject to further regulatory scrutiny, reform efforts and/or other actions. Any such regulatory scrutiny, reform efforts and/or other actions could increase the costs and risks of administering or otherwise participating in the setting of a "benchmark" and complying with applicable regulations or requirements. Such factors may have the effect of discouraging market participants from continuing to administer or contribute to certain "benchmarks", trigger changes in the rules or methodologies used in certain "benchmarks" or lead to the elimination, discontinuance or obsolescence of certain "benchmarks". Following the implementation of reforms, the manner of administration of benchmarks may change, with the result that they may perform differently than in the past, or the benchmark could be eliminated or discontinued entirely, or there could be other consequences that cannot be predicted. Even prior to the implementation of any changes, uncertainty as to the nature of potential alternative reference rates and as to the nature and effect of potential changes to such benchmark may adversely affect such benchmark during the term of the relevant notes, as well as the value of, the return on and/or trading market for notes linked to such benchmark. Any of the foregoing consequences could have a material adverse effect on the interest rate on, value of, return on and trading market for any notes linked to such a "benchmark" rate.

Furthermore, if any base rate is discontinued or ceases to be published, there can be no assurances that the Bank and other market participants will be adequately prepared for such discontinuance or cessation, which may have an unpredictable impact on contractual mechanics (including, but not limited to, the interest rate to be paid by the Bank with respect to specific notes), among other adverse consequences with respect to an applicable series of notes.

The applicable base rate may be modified or discontinued and a series of notes may bear interest by reference to a rate other than the original base rate, which could adversely affect the value of such notes.

The base rates are published by third-party administrators based on data received by such administrators from sources other than us, and we have no control over the methods of calculation, publication schedule, rate revision practices or availability of such rates at any time. There can be no guarantee that the applicable base rate will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the notes. If the manner in which the applicable base rate is calculated is changed, that change may result in a reduction in the amount of interest payable on a series of notes, and the trading prices of such series of notes. In addition, the administrator of the applicable base rate may withdraw, modify or amend the published data with respect to the applicable base rate in the sole discretion of such administrator and without notice, in which case the interest rate on such affected notes will not be adjusted for any modifications or amendments to

such applicable base rate data that the applicable administrator may publish after the interest rate for an applicable interest period has been determined.

If the applicable base rate is eliminated or discontinued, or if certain other events occur with respect to such base rate, then the interest rate on a series of notes will be calculated using an alternative base rate, which could require or result in adjustments to the interest determination and other provisions of the notes, and, with respect to certain such rates, decisions or elections with respect to new interest determination conventions and other provisions. Any such use, adjustment, decision or election may result in adverse consequences to holders of any such series of notes.

Potential conflicts of interest may arise if the relevant base rate for floating rate notes has been discontinued or is unavailable.

If the relevant base rate for floating rate notes has been eliminated or discontinued, the terms of the notes provide for certain "fallback" arrangements that the calculation agent will use to determine the applicable base rate, which may include the selection of an alternative reference rate as well as certain adjustments to the terms of the notes. The terms that the calculation agent may adjust include, but are not limited to, the base rate, the applicable currency and/or index maturity for such alternative reference rate, the spread or spread multiplier, as well as the business day convention, the definition of business day, interest determination dates and related provisions and definitions. This may require the exercise of discretion and the making of subjective judgments. In making these discretionary judgments, the fact that we are acting as calculation agent for the notes, may cause us to have economic interests that are adverse to your interests as an investor in the notes. Any selection, adjustments or determinations by the calculation agent could adversely affect the interest rate and the return on the notes. If a Benchmark Transition Event occurs, a U.S. Holder holding floating rate notes may be deemed to exchange such Floating Rate Notes for new notes for U.S federal income tax purposes, which may be taxable to such U.S. Holder. Proposed U.S. Treasury Regulations, which are not yet in effect but upon which taxpavers may rely, provide that in certain circumstances, the replacement of the Benchmark with a qualifying reference rate would not result in a deemed exchange under the Code. U.S. Holders should consult with their own tax advisers regarding the potential consequences of a Benchmark Transition Event.

DESCRIPTION OF NOTES

References in this prospectus supplement to the "**Bank**," "we," "our" or "us" refer to Deutsche Bank AG, including, as the context may require, acting through one of its branches. As context may require, references to "you" or "holders" mean either (a) those who invest in the notes being offered, whether they are the direct holders or owners of beneficial interests in those notes or (b) those who own notes registered in their own names, on the books that we or the registrar maintain for this purpose, and not those who own beneficial interests in notes issued in book-entry form through The Depository Trust Company or another depositary or in notes registered in street name. Owners of beneficial interests in the notes should read the section entitled "Description of Notes—Form, Legal Ownership and Denomination of Notes."

General Information Regarding Senior Notes, Series A

We refer to the Senior Notes, Series A offered under this prospectus supplement as our "Series A notes" or the "notes," which are a separate series of our debt securities. We refer to the offering of the Series A notes as our "Series A program." Investors should carefully read the general terms and provisions of our debt securities in "Description of Debt Securities — Senior Debt Securities" in the accompanying prospectus. This section supplements that description.

A pricing supplement to this prospectus supplement will add specific terms for each issuance of notes and may modify or replace any of the information in this section and in "Description of Debt Securities — Senior Debt Securities" in the accompanying prospectus. If the pricing supplement is inconsistent with this prospectus supplement or the accompanying prospectus, the terms in the pricing supplement will control with regard to the note you purchase. Therefore, the statements made in this prospectus supplement may not be the terms that apply to the note you purchase.

We Will Issue Notes Under the Indenture. The Series A notes issued under our Series A program will be governed by the amended and restated senior indenture, dated as of August 3, 2021, among us, Delaware Trust Company, as trustee, and Deutsche Bank Trust Company Americas, as issuing agent, paying agent, authenticating agent and registrar, as may be amended and supplemented from time to time (the "Indenture") (see "Description of Debt Securities — Senior Debt Securities — The Senior Indenture" in the accompanying prospectus). The notes issued under the Indenture will constitute a single series under that Indenture, together with any notes we have issued in the past or that we issue in the future under that Indenture that we designate as being part of that series. From time to time, we may create and issue additional notes with the same terms as previous Series A notes, so that the additional notes are not fungible with the earlier notes for U.S. federal income tax purposes, they will be issued under a separate CUSIP or other identifying number.

By acquiring the notes, you will be bound by and will be deemed to consent to the imposition of any Resolution Measure by the competent resolution authority, which may include the write down of all, or a portion, of any payment (or delivery of any property) 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 the section "Risk Factors" beginning on page 20 in the accompanying prospectus and the section "Resolution Measures" beginning on page 76 in the accompanying prospectus for more information.

Outstanding Indebtedness of the Bank. The Indenture does not limit the amount of additional indebtedness that we may incur.

How the Notes Rank Against Other Debt. The notes will constitute our unsecured and unsubordinated obligations and shall rank *pari passu* among themselves and *pari passu* with all of our other unsecured and unsubordinated obligations, subject, however, to statutory priorities conferred upon certain unsecured and unsubordinated obligations in the event of any Resolution Measures imposed on us or in the event of our dissolution, liquidation, insolvency or composition, or if other proceedings are opened for the avoidance of the insolvency of, or against, us; in accordance with Section 46f(5) of the German Banking Act (*Kreditwesengesetz*), our obligations under the notes will rank in priority to our senior non-preferred obligations under any of our debt instruments (*Schuldtitel*) within the meaning of Section 46f(6) sentence 1 of the German Banking Act (including the senior non-preferred obligations under any such debt instruments that we issued before July 21, 2018 and that are subject to Section 46f(9) of the German Banking Act) or any successor provision.

Office Substitution. If specified in the applicable pricing supplement, we may, without the consent of the holders or the trustee, designate our head office or another branch of ours (in this paragraph, we refer to each of our head office or any of our branches as an "office") as substitute for the office through which we have acted to issue such series with the same effect as if such substitute office had been originally named as the office through which we had acted to issue such series for all purposes under the Indenture and such series. In order to give effect to such a substitution, we will give notice of the substitute office will, without any amendment of such series of notes. With effect from the substitution date, such substitute office will, without any amendment of such series of notes or entry into any supplemental indenture, assume all of the obligations of the originally-named office as principal obligor under such series of notes. The applicable pricing supplement will include a reference to office substitution if included as a term of a series of notes.

This Section Is Only a Summary. The accompanying prospectus and this prospectus supplement provide only summaries of the Indenture's material terms. They do not, however, describe every aspect of the Indenture and the notes. The Indenture and its associated documents, including the applicable note, contain the full legal text of the matters described in this section and in the accompanying prospectus. A copy of the Indenture has been filed with the Securities and Exchange Commission (the "SEC") as part of the registration statement for the notes.

Some Frequently Used Definitions. We have defined some of the terms that we use frequently in this prospectus supplement below:

A "**business day**" means, unless otherwise stated in the applicable pricing supplement, for any note, any day other than a day that is (i) a Saturday or Sunday, (ii) a day on which banking institutions generally in the City of New York are authorized or obligated by law, regulation or executive order to close, (iii) a day on which transactions in U.S. dollars are not conducted in the City of New York; and, in addition, (a) for notes having a specified currency other than U.S. dollars only, other than notes denominated in euro, any day that in the principal financial center of the country of the specified currency is not a day on which banking institutions generally are authorized or obligated by law, regulation or executive order to close; and (b) for notes denominated in euro, a day on which TARGET2 is operating.

"Clearstream, Luxembourg" means Clearstream Banking, société anonyme, Luxembourg.

"Depositary" means The Depository Trust Company, New York, New York.

"Euroclear operator" means Euroclear Bank SA/NV, as operator of the Euroclear System.

"**Euro-zone**" means the region comprising member states of the European Union that have adopted a single currency in accordance with the relevant treaty of the European Union, as amended.

An "interest payment date" for any note means a date on which, under the terms of that note, regularly scheduled interest is payable.

A "**New York Banking Day**" means, unless otherwise stated in the applicable pricing supplement, for any note, any day except a Saturday, Sunday or a legal holiday in The City of New York or a day on which banking institutions in The City of New York are authorized or required by law or executive order to close.

The term "**specified currency**" means the currency or currencies in respect of notes in which the principal, premium (if any) or interest (if any) is not denominated or payable in U.S. dollars.

The "**record date**" for any interest payment date is, (a) in the case of global notes, the date that is one New York Banking Day immediately preceding the relevant date of payment with respect to such interest payment date and, (b) in the case of certificated notes, the date that is 15 calendar days prior to that interest payment date, whether or not that day is a business day, unless otherwise specified in the applicable pricing supplement. However, upon maturity, redemption or repayment, the paying agent will pay any interest due to the holder to whom it pays the principal of the note.

The term "**Reuters page**" means the display on Reuters 3000 Xtra, or any successor service, on the page or pages specified in this prospectus supplement or the relevant pricing supplement, or any replacement page or pages on that service.

"TARGET2" means the Trans-European Automated Real-time Gross Settlement Express Transfer System.

"TARGET Settlement Day" means any day on which TARGET2 is operating.

References in this prospectus supplement to "U.S. dollar," "U.S.\$" or "\$" are to the currency of the United States of America. References in this prospectus supplement to "euro" or "€" are to the single currency introduced at the commencement of the third stage of the European Economic and Monetary Union pursuant to the treaty establishing the European Community, as amended.

Types of Notes

We may issue the following types of notes:

Fixed Rate Notes

A note of this type will bear interest at a fixed rate described in the applicable pricing supplement. This type includes zero coupon notes, which bear no interest.

Floating Rate Notes

A note of this type will bear interest at rates that are determined by reference to an interest rate or interest rate formula. In some cases, the rates may also be adjusted by adding or subtracting a spread or multiplying by a spread multiplier and may be subject to a minimum rate or a maximum rate. The various interest rate formulas and these other features are described below under "—Interest Rates—Floating Rate Notes." If the note you purchase is a floating rate note, the formula and any adjustments that apply to the interest rate will be specified in the pricing supplement.

Linked Notes

A note of this type provides that the amount payable at its maturity and/or the amount of interest payable on an interest payment date will be determined by reference to:

- one or more currencies;
- one or more commodities;
- one or more securities of ours or of entities that are or are not affiliated with us;
- interest rates;
- one or more intangibles, articles, goods or any other property;
- any other financial, economic or other measures or instruments, including the occurrence or nonoccurrence of any events or circumstances; and/or
- indices or baskets of any of these items, including baskets of indices.

The holder of a linked note may receive an amount at maturity that is greater than or less than the principal amount of the note depending upon the value, price or level of the applicable underlying to which the note is linked. That value, price or level may fluctuate over time. The applicable pricing supplement will include information about the relevant underlying and about how amounts that are to become payable will be determined by reference to the underlying. A linked note may provide for either cash settlement or physical settlement by delivery of the applicable underlying or another property of the type listed above. A linked note may also provide that the form of settlement may be determined at our option or at the holder's option.

Investing in linked notes involves special risks. You should carefully read the risk factors section in the applicable pricing supplement for your linked note.

Exchangeable Notes

We may issue notes, which we refer to as "exchangeable notes," that are optionally or mandatorily exchangeable into:

- securities of ours or of entities that are or are not affiliated with us;
- a basket or baskets of those securities;
- other property; or

• any combination of, or the cash value of, such securities or other property.

The exchangeable notes may or may not bear interest or be issued with original issue discount or at a premium. The general terms of the exchangeable notes are described below. Please note that exchangeable notes may specify other terms in the relevant pricing supplement, which may differ from those described below.

Payments upon Exchange. The applicable pricing supplement will specify whether upon exchange, at maturity or otherwise, the holder of an exchangeable note may receive, at the specified exchange rate, either the underlying property or the cash value of such underlying property. The underlying property may be our securities or securities of entities that are or are not affiliated with us; a basket or baskets of those securities; other property; or any combination of the above. The exchangeable notes may or may not provide for protection against fluctuations in the exchange rate between the currency in which that note is denominated and the currency or currencies in which the market prices of the underlying property or properties are quoted. Exchangeable notes may have other terms, which will be specified in the applicable pricing supplement.

Mandatorily Exchangeable Notes. At maturity, the holder of a mandatorily exchangeable note must exchange the note for the underlying property or the cash value of such underlying property at a specified rate of exchange, and, therefore, depending upon the value of the underlying property at maturity, the holder of a mandatorily exchangeable note may receive less than the stated principal amount of the note at maturity. If so indicated in the applicable pricing supplement, the specified rate at which a mandatorily exchangeable note may be exchanged may vary depending on the value of the underlying property so that, upon exchange, the holder participates in a percentage, which may be less than, equal to or greater than 100% of the change in value of the underlying property. Mandatory exchangeable notes may include notes where we have the right, but not the obligation, to require holders of notes to exchange their notes for the underlying property.

Optionally Exchangeable Notes. The holder of an optionally exchangeable note may, during a period, or at a specific time or times, exchange the note for the underlying property or the cash value of such underlying property at a specified rate of exchange or at a rate of exchange determined pursuant to a formula described in the applicable pricing supplement. If specified in the applicable pricing supplement, we will have the option to redeem the optionally exchangeable note prior to maturity. If the holder of an optionally exchangeable note does not elect to exchange the note prior to maturity or any applicable redemption date, the holder will receive the principal amount of the note plus any accrued interest at maturity or upon redemption, if so specified in the applicable pricing supplement.

Special Requirements for Exchange of Global Notes. If an optionally exchangeable note is represented by a global note, the Depositary's nominee will be the holder of that note and therefore will be the only entity that can exercise a right to exchange or other elective rights. In order to ensure that the Depositary's nominee will timely exercise such elective rights, the beneficial owner of the note must instruct the broker or other direct or indirect participant through which it holds an interest in that note to notify the Depositary of its desire to exercise its rights. Different firms have different deadlines for accepting instructions from their customers. Each beneficial owner should consult the broker or other participant through which it holds an interest in a note in order to ascertain the deadline for ensuring that timely notice of elective rights will be delivered to the Depositary.

Payments upon Acceleration of Maturity or upon Tax Redemption. Unless otherwise specified in the applicable pricing supplement, if the principal amount payable at maturity of any exchangeable note is declared due and payable prior to maturity as a result of an event of default or tax redemption (see "Series A Notes Offered on a Global Basis— Tax Redemption"), the amount payable on:

- an optionally exchangeable note will equal the face amount of the note plus accrued interest, if any, to but excluding the date of payment, except that if a holder has exchanged an optionally exchangeable note prior to the date of acceleration or tax redemption without having received the amount due upon exchange, the amount payable will be an amount in cash equal to the amount due upon exchange and will not include any accrued but unpaid interest; and
- a mandatorily exchangeable note will equal an amount determined as if the date of acceleration or tax redemption were the final valuation date, plus accrued interest, if any, to but excluding the date of payment.

The amount payable if the principal amount payable at maturity of an exchangeable note is declared due and payable prior to maturity as a result of any other type of redemption will be set forth in the applicable pricing supplement.

Original Issue Discount Notes

A fixed rate note, a floating rate note, a linked note or an exchangeable note may be an original issue discount note. A note of this type is issued as a discounted security (bearing no interest or interest at a rate that at the time of issuance is below market rates) to be sold at an issue price below its stated principal amount. Special considerations applicable to any original issue discount notes will be described in the applicable pricing supplement.

Unless otherwise specified in the applicable pricing supplement, in the event of redemption, repayment or acceleration of maturity of an original issue discount note, the amount payable to the holder will be equal to the sum of:

- the issue price (increased by any accruals of discount) or, in the event of any redemption by us of such original issue discount note (if applicable), the issue price (increased by any accruals of discount) multiplied by the initial redemption percentage specified in the applicable pricing supplement (as adjusted by the initial redemption percentage reduction, if applicable) and
- (ii) any unpaid interest on such original issue discount note accrued from the date of issue to the date of such redemption, repayment or acceleration of maturity.

Unless otherwise specified in the applicable pricing supplement, for purposes of determining the amount of discount that has accrued as of any date on which a redemption, repayment or acceleration of maturity occurs for an original issue discount note, the discount will be accrued using a constant yield method. The constant yield will be calculated using (i) a 30-day month, 360-day year convention, (ii) a compounding period that, except for the initial period (as defined below), corresponds to the shortest period between interest payment dates for the applicable original issue discount note (with ratable accruals within a compounding period) and (iii) an assumption that the maturity of such original issue discount note will not be accelerated. If the period from the date of issue to the initial interest payment date for an original issue discount note, which we refer to as the "**initial period**," is shorter than the compounding period for such original issue discount note, a proportionate amount of the yield for an entire compounding period will be accrued. If the initial period is longer than the compounding period, then such period will be divided into a regular compounding period and a short period with the short period being treated as provided in the preceding sentence. The accrual of the applicable discount may differ from the accrual of original issue discount for U.S. federal income tax purposes under the Internal Revenue Code of 1986, as amended to the date hereof (the "**Code**").

Certain original issue discount notes may not be treated as having original issue discount for federal income tax purposes, and notes other than original issue discount notes may be treated as issued with original issue discount for federal income tax purposes.

Extendible Notes

We may issue from time to time "**extendible notes**," with respect to which we will have the option to extend the maturity of a note for one or more periods up to but not beyond the final maturity date set forth in the applicable pricing supplement. If we have such an option with respect to any note, the procedures for extension will be described in the applicable pricing supplement. Amortizing notes may not be designated as extendible notes.

Renewable Notes

We may also issue "**renewable notes**," which will mature on an interest payment date specified in the applicable pricing supplement, unless the maturity of all or a portion of the principal amount of the notes is extended by the holders in accordance with the procedures set forth in the applicable pricing supplement.

Terms Specified in Pricing Supplements

A pricing supplement generally will specify the following terms of any issuance of our Series A notes to the extent applicable:

- the specific designation of the notes;
- the issue price (price to public);
- the aggregate principal amount, purchase price and denomination;

- the original issue date;
- the stated maturity date and any terms related to any extension or shortening of the maturity date;
- whether the notes are fixed rate notes, floating rate notes, linked notes and/or exchangeable notes;
- for fixed rate notes, the rate per year at which the notes will bear interest, if any, or the method of calculating that rate and the dates on which interest will be payable;
- for floating rate notes, the base rate, the index maturity (if any), the spread, the spread multiplier, the initial interest rate, the interest reset periods, the interest payment dates, the maximum interest rate, the minimum interest rate and any other terms relating to the particular method of calculating the interest rate for the note;
- for floating rate notes, whether they are renewable notes;
- for linked notes, the underlying asset or measure to which the notes are linked, the principal amount, if any, or the amount calculated with respect to the principal amount, if any, we will pay you at maturity, the amount of interest, if any, we will pay you on an interest payment date, or of any other interim and/or contingent payment, the formula we will use to calculate these amounts, if any, and whether your note will be payable in cash or other property;
- for exchangeable notes, the terms on which holders of the notes may exchange them into the underlying property or the cash value of such underlying property; any specific terms relating to the adjustment of the exchange feature; the period during which the holders may effect the exchange; and the other items described in "—Exchangeable Notes" above;
- for currency-linked notes, information as to the one or more currencies to which the principal amount payable on any principal payment date or the amount of interest payable on any interest payment date is linked or indexed; the currency in which the face amount of the currency-linked note is denominated; the currency in which principal on the currency-linked note will be paid; and specific historic exchange rate information and any currency risks relating to the specific currencies selected;
- whether the notes may be redeemed, in whole or in part, at our option or repaid at your option, prior to the stated maturity date, and the terms of any redemption or repayment;
- whether the note has been issued with original issue discount or is an amortizing note (and, if the note is an amortizing note, the amortization schedule);
- if any note is not denominated and payable in U.S. dollars, the currency or currencies in which the
 principal, premium, if any, and interest, if any, will be paid, which we refer to as the "specified currency,"
 along with any other terms relating to the non-U.S. dollar denomination, including exchange rates as
 against the U.S. dollar at selected times during the last five years and any exchange controls affecting
 that specified currency;
- the circumstances, if any, under which we will pay additional amounts on the notes for any tax, assessment or governmental charge withheld or deducted and, if so, whether we will have the option to redeem those notes rather than pay the additional amounts; and
- any other terms on which we will issue the notes.

Form, Legal Ownership and Denomination of Notes

Form. We will issue notes in fully registered, global (*i.e.*, book-entry) form only, unless we specify otherwise in the applicable pricing supplement. Notes in book-entry form will be represented by a global note registered in the name of the Depositary or its nominee, which will be the sole registered owner and the holder of all the notes represented by the global note. An investor therefore will not be a holder of the note, but will own only beneficial interests in a global note, which are held by means of an account with a broker, bank or other financial institution that in turn has an account as a "participant" in the Depositary or with another institution that does. The Depositary maintains a computerized, book-entry system that will reflect the interests in the global notes held by participants in its book-entry system. An investor's beneficial interest in the global notes will, in turn, be reflected only in the records of the Depositary's direct or indirect participants though an account maintained by the investor with such participant.

Except as set forth in the accompanying prospectus under "Forms of Securities—Global Securities," you may not exchange registered global notes or interests in registered global notes for a certificate issued to you in definitive form (a "**certificated note**"). A further description of the Depositary's procedures for global notes representing book-entry notes is set forth below under "The Depositary" and in the accompanying prospectus under "Forms of Securities—Global Securities."

Legal Ownership. The person or entity in whose name the notes are registered will be considered the holder and legal owner of the notes. Our obligations under the Indenture, as well as the obligations of the trustee and those of any third parties employed by us or the trustee, run only to the registered holders of the notes. We do not have obligations to investors who own beneficial interests in global notes, in street name or by any other indirect means. For example, once we make a payment or give a notice to the registered holder, we have no further responsibility for that payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect holders (*e.g.*, owners of beneficial interests), but does not do so. Similarly, if we need to ask the holders of the notes to vote on a proposed amendment to the notes, we would seek approval only from the registered holders, and not the indirect holders, of the notes.

Special Considerations for Indirect Holders. If you hold notes through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle voting if it were ever required;
- whether and how you can instruct it to send you notes registered in your own name so you can be a direct holder, if that is permitted; and
- how it would pursue rights under the notes if there were a default or other event triggering the need for holders to act to protect their interests.

Denominations. Unless we provide otherwise in the applicable pricing supplement, we will issue the notes:

- for U.S. dollar-denominated notes, in denominations of \$1,000 or any amount greater than \$1,000 that is an integral multiple of \$1,000; or
- for notes denominated in a specified currency other than U.S. dollars, in denominations of the equivalent of \$1,000, rounded to an integral multiple of 1,000 units of the specified currency, or any larger integral multiple of 1,000 units of the specified currency, as determined by reference to the market exchange rate, as defined under "—Interest and Principal Payments—Unavailability of Foreign Currency" below, on the business day immediately preceding the date of issuance.

Governing Law. The Indenture is, and the notes will be, governed by and construed in accordance with the laws of the State of New York, except as may be otherwise required by mandatory provisions of law.

Interest Rates

Fixed Rate Notes

Each fixed rate note will bear interest from the date of issuance at the annual rate specified in the applicable pricing supplement until the principal is paid or made available for payment. Unless otherwise specified in the applicable pricing supplement, the following provisions will apply to fixed rate notes offered pursuant to this prospectus supplement.

How Interest Is Calculated. Interest on fixed rate notes will be computed on the basis of a 360-day year of twelve 30-day months.

How Interest Accrues. Interest on fixed rate notes will accrue from, and including, the most recent interest payment date to which interest has been paid or duly provided for, or, if no interest has been paid or duly provided for, from, and including, the issue date or any other date specified in the applicable pricing supplement on which interest begins to accrue, to, but excluding, the next interest payment date, or, if earlier, the date on which the principal has been paid or duly made available for payment, except as described below under "— If a Payment Date is Not a Business Day" (each such period, an "interest period").

When Interest Is Paid. Payments of interest on fixed rate notes will be made on the interest payment dates specified in the applicable pricing supplement. However, if the period of time between the issue date and the first interest payment date thereafter is less than the period of time between a record date and an interest payment date, interest will not be paid on the first interest payment date, but will be paid on the second interest payment date.

Amount of Interest Payable. Interest payments for fixed rate notes will include accrued interest from, and including, the date of issue or from, and including, the last interest payment date in respect of which interest has been paid, as the case may be, to, but excluding, the relevant interest payment date or date of maturity or earlier redemption or repayment, as the case may be.

If a Payment Date is Not a Business Day. If any scheduled interest payment date is not a business day, we will pay interest on the next business day, but interest on that payment will not accrue during the period from and after the scheduled interest payment date. If the scheduled maturity date or date of redemption or repayment is not a business day, we may pay interest, if any, and principal and premium, if any, on the next succeeding business day, but interest on that payment will not accrue during the period from and after such scheduled maturity date or date of redemption or repayment.

Amortizing Notes. Amortizing notes are notes for which payments combining principal and interest are made in installments over the life of the note. Payments with respect to amortizing notes will be applied first to interest due and payable on the notes and then to the reduction of the unpaid principal amount of the notes. Information on the additional terms and conditions of any issue of amortizing notes will be provided in the applicable pricing supplement. A table setting forth repayment information in respect of each amortizing note will be included in the applicable pricing supplement.

Floating Rate Notes

Each floating rate note will mature on the date specified in the applicable pricing supplement.

Each floating rate note will bear interest at a floating rate determined by reference to an interest rate or interest rate formula, which we refer to as the "**base rate**." The base rate may be one or more of the following:

- EURIBOR,
- Compounded SOFR, or
- any other reference interest rate specified in the applicable pricing supplement.

Formula for Interest Rates. The interest rate on each floating rate note will be calculated by reference to:

- the specified base rate based on the index maturity, if any,
- plus or minus the spread, if any, and/or
- multiplied by the spread multiplier, if any.

For any floating rate note, if applicable, "**index maturity**" means the period of maturity of the instrument or obligation from which the base rate is calculated and will be specified in the applicable pricing supplement. The "**spread**" is the number of basis points (one one-hundredth of a percentage point) specified in the applicable pricing supplement to be *added* to, or *subtracted* from, the base rate for a floating rate note. The "**spread**" is the percentage specified, if any, in the applicable pricing supplement by which the base rate will be multiplied to determine the applicable interest rate for such floating rate note.

Limitations on Interest Rate. A floating rate note may also have either or both of the following limitations on the interest rate:

- a maximum limitation, or ceiling, on the rate of interest which may accrue during any interest period, which we refer to as the "maximum interest rate;" and/or
- a minimum limitation, or floor, on the rate of interest that may accrue during any interest period, which we refer to as the "minimum interest rate."

Any applicable maximum interest rate or minimum interest rate will be set forth in the applicable pricing supplement.

In addition, the interest rate on a floating rate note may not be less than 0% per annum or higher than the maximum rate permitted by applicable New York law, as that maximum rate may be modified by United States law of general application.

How Certain Floating Interest Rates Are Reset. The terms and provisions set forth in this section will apply to any series of notes for which the specified base rate is EURIBOR or any other base rate that the applicable pricing supplement specifies this section applies to, but will not apply to series of notes for which the specified base rate specified is Compounded SOFR. The interest rate in effect from the date of issue to the first interest reset date for a floating rate note will be the initial interest rate specified in the applicable pricing supplement. We refer to this rate as the "initial interest rate." The interest rate on each floating rate note may be reset daily, weekly, monthly, quarterly, semiannually or annually or on any other periodic basis described in the applicable pricing supplement. We refer to this period as the "interest reset period." The "interest reset date" in respect of each interest reset period will be the first day of each interest reset period, unless otherwise specified in the applicable pricing supplement.

If any interest reset date for any floating rate note would otherwise be a day that is not a business day, such interest reset date, unless otherwise specified in the applicable pricing supplement, will be postponed to the next succeeding day that is a business day; except that, in the case of a EURIBOR note, if such business day is in the next succeeding calendar month, such interest reset date, unless otherwise specified in the applicable pricing supplement, will be the immediately preceding business day.

The interest rate applicable to each interest reset period commencing on an interest reset date will be the rate per annum determined by the calculation agent on the interest determination date. The "interest determination date" with respect to:

• EURIBOR will be the second TARGET Settlement Day preceding the applicable interest reset date;

If the interest rate for a floating rate note is determined by reference to two or more base rates, the interest determination date pertaining to such note will be the most recent business day that is at least two business days prior to the applicable interest reset date for such floating rate note on which each base rate is determinable.

Each base rate will be determined as of such date, and the applicable interest rate will take effect on the applicable interest reset date.

The interest rate in effect for the ten calendar days immediately prior to maturity, redemption or repayment will be the one in effect on the tenth calendar day preceding the maturity, redemption or repayment date.

In the detailed descriptions of the various base rates which follow, the "**calculation date**" pertaining to an interest determination date means the earlier of (1) the tenth calendar day after that interest determination date, or, if that day is not a business day, the next succeeding business day, and (2) the business day immediately preceding the applicable interest payment date or maturity date or, for any principal amount to be redeemed or repaid, any redemption or repayment date.

How Interest Is Calculated. Interest on floating rate notes will accrue from, and including, the most recent interest payment date to which interest has been paid or duly provided for, or, if no interest has been paid or duly provided for, from, and including, the issue date or any other date specified in a pricing supplement on which interest begins to accrue. Interest will accrue to but excluding the next interest payment date or, if earlier, the date on which the principal has been paid or duly made available for payment, except as described below under "—If a Payment Date is Not a Business Day."

Floating rate notes will have a calculation agent, which will be Deutsche Bank AG, London Branch, unless otherwise specified in the applicable pricing supplement. Upon the request of the holder of any EURIBOR note, the calculation agent will provide the interest rate then in effect and, if determined, the interest rate that will become effective on the next interest reset date for that floating rate note. Upon the request of the holder of any Compounded SOFR note, the calculation agent will provide Compounded SOFR, the interest rate and the amount of interest accrued with respect to any interest period for such note, after Compounded SOFR, and such interest rate and accrued interest have been determined.

The amount of accrued interest on a floating-rate note for an interest period is calculated by multiplying the principal amount of such note by an accrued interest factor. This accrued interest factor will be determined by multiplying the per annum floating interest rate determined by reference to the applicable base rate, as determined for the applicable interest period, by a factor resulting from the day count convention that applies with respect to such determination. The factor resulting from the day count convention will be, if so specified in the

applicable pricing supplement, one of the following, or may be any other convention set forth in the applicable pricing supplement:

- a factor based on a 360-day year of twelve 30-day months if the day count convention specified in the applicable pricing supplement is "30/360";
- a factor equal to the actual number of days in the relevant period divided by 360 if the day count convention specified in the applicable pricing supplement is "Actual/360";
- a factor equal to the actual number of days in the relevant period divided by 365, or if any portion of that
 relevant period falls in a leap year, the sum of (A) the actual number of days in that portion of the
 relevant period falling in a leap year divided by 366 and (B) the actual number of days in that portion of
 the relevant period falling in a non-leap year divided by 365, if the day count convention specified in the
 applicable pricing supplement is "Actual/Actual"; or
- a factor equal to the actual number of days in the relevant period divided by 365, if the day count convention specified in the applicable pricing supplement is "Actual/365 (Fixed)".

If no day count convention is specified in the applicable pricing supplement, the factor for EURIBOR notes and Compounded SOFR notes will be equal to the actual number of days in the relevant period divided by 360.

All calculations with respect to the amount of interest payable on 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); all U.S. dollar amounts related to determination of the payment per principal amount of notes at maturity 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 U.S. dollar amounts paid on the aggregate principal amount of notes per holder will be rounded to the nearest cent, with one-half cent rounded upward.

When Interest Is Paid. We will pay interest on floating rate notes on the interest payment dates specified in the applicable pricing supplement. However, if the period of time between the issue date and the first interest payment date thereafter is less than the period of time between a record date and an interest payment date, interest will not be paid on the first interest payment date, but will be paid on the second interest payment date.

If a Payment Date Is Not a Business Day. If any scheduled interest payment date, other than the maturity date or any earlier redemption or repayment date, for any floating rate note falls on a day that is not a business day, it will be postponed to the following business day; except that, in the case of a EURIBOR note or a Compounded SOFR note, if that business day would fall in the next calendar month, the interest payment date will be the immediately preceding business day. If the scheduled maturity date or any earlier redemption or repayment date of a floating rate note falls on a day that is not a business day, the payment of principal, premium, if any, and interest, if any, will be made on the next succeeding business day, but interest on that payment will not accrue during the period from and after such maturity, redemption or repayment date.

EURIBOR Notes

EURIBOR notes will bear interest at an interest rate based on the Euro Interbank Offered Rate, which is commonly referred to as "EURIBOR," and any spread and/or spread multiplier and will be subject to the minimum interest rate and the maximum interest rate, if any.

EURIBOR, for any interest determination date, will be the rate for interbank term deposits in euro, as sponsored, calculated and published jointly by the European Money Markets Institute, having the index maturity specified in the applicable pricing supplement, as such rate appears on Reuters page EURIBOR01 (or any other page as may replace Reuters page EURIBOR01) as of 11:00 A.M., Brussels time on such interest determination date.

The following procedures will be followed if the rate cannot be determined as described above:

If the calculation agent determines that EURIBOR with the index maturity specified in the relevant
pricing supplement has been discontinued or ceases to be calculated or published, the calculation
agent will, in its sole discretion, select an alternative reference rate as a substitute interest rate for
such EURIBOR notes; provided that if the calculation agent determines that there is an industry
accepted successor interest rate for the discontinued EURIBOR, the calculation agent shall use

such successor interest rate as the substitute interest rate for such EURIBOR notes. As part of any such substitution, the calculation agent may make adjustments to the terms of such EURIBOR notes, including, but not limited to, the definition of the base rate (including the related fallback mechanism), the applicable currency and/or index maturity for such alternative reference rate, the spread or spread multiplier, as well as the business day convention, the definition of business day, interest determination dates and related provisions and definitions, in each case consistent with accepted market practice for the use of such alternative reference rate for debt obligations such as the notes.

- If the calculation agent has not selected an alternative reference rate as a substitute interest rate for EURIBOR notes as provided above, the following will apply:
 - o If the rate described in the second paragraph of this subsection does not appear on Reuters page EURIBOR01 (or any other page as may replace Reuters page EURIBOR01), or is not so published by 11:00 A.M., Brussels Time, on the applicable interest determination date, EURIBOR for such interest determination date will be the rate calculated by the calculation agent as the arithmetic mean of at least two quotations obtained by the calculation agent after requesting the principal Euro-zone offices of four major banks in the Euro-zone interbank market, which may include us, as selected by the calculation agent, to provide the calculation agent with its offered quotation for interbank term deposits in euro for the period of the index maturity designated in the applicable pricing supplement, commencing on the applicable interest reset date, to prime banks in the Euro-zone interbank market at approximately 11:00 A.M., Brussels Time, on the applicable interest determination date and in a principal amount not less than the equivalent of U.S.\$1,000,000 in euro that is representative for a single transaction in euro in such market at such time.
 - If fewer than two quotations are so provided, the rate on the applicable interest determination date will be calculated by the calculation agent and will be the arithmetic mean of the rates quoted at approximately 11:00 A.M., Brussels Time, on such interest determination date by four major banks in the Euro-zone interbank market, as selected by the calculation agent, for loans in euro to leading European banks, having the index maturity designated in the applicable pricing supplement, commencing on the applicable interest reset date and in principal amount not less than the equivalent of U.S. \$1,000,000 in euro that is representative for a single transaction in euro in such market at such time.
 - If the banks so selected by the calculation agent are not providing quotations as set forth above, then the calculation agent, after consulting such sources as it deems comparable to any of the foregoing quotations or display page, or any such source as it deems reasonable from which to estimate EURIBOR with the relevant index maturity, will determine EURIBOR for that interest determination date in its sole discretion.

Secured Overnight Financing Rate (SOFR)

SOFR is published by the Federal Reserve Bank of New York (the "**New York Federal Reserve**") and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. The New York Federal Reserve reports that SOFR includes all trades in the Broad General Collateral Rate and 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**"), and SOFR is filtered by the New York Federal Reserve to remove some (but not all) of the foregoing transactions considered to be "specials." According to the New York Federal Reserve, "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 Federal Reserve 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 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 Federal Reserve also notes that it obtains information from DTCC Solutions LLC, an affiliate of DTCC.

If data for a given market segment were unavailable for any day, then the most recently available data for that segment would be utilized, with the rates on each transaction from that day adjusted to account for any change in the level of market rates in that segment over the intervening period. SOFR would be calculated from this adjusted prior day's data for segments where current data were unavailable, and unadjusted data for any segments where data were available. To determine the change in the level of market rates over the intervening period for the missing market segment, the New York Federal Reserve would use information collected through a daily survey conducted by its Trading Desk of primary dealers' repo borrowing activity. Such daily survey would include information reported by Deutsche Bank AG, as a primary dealer, or its affiliates.

The New York Federal Reserve notes on its publication page for SOFR that use of SOFR is subject to important limitations, indemnification obligations and disclaimers, including that the New York Federal Reserve may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice.

Each U.S. Government Securities Business Day, the New York Federal Reserve publishes SOFR on its website at approximately 8:00 a.m., New York City time. If errors are discovered in the transaction data provided by The Bank of New York Mellon or DTCC Solutions LLC, or in the calculation process, subsequent to the initial publication of SOFR but on that same day, SOFR and the accompanying summary statistics may be republished at approximately 2:30 p.m., New York City time. Additionally, if transaction data from The Bank of New York Mellon or DTCC Solutions LLC had previously not been available in time for publication, but became available later in the day, the affected rate or rates may be republished at around this time. Rate revisions will only be effected on the same day as initial publication and will only be republished if the change in the rate exceeds one basis point. Any time a rate is revised, a footnote to the New York Federal Reserve's publication would indicate the revision. This revision threshold will be reviewed periodically by the New York Federal Reserve and may be changed based on market conditions.

Because SOFR is published by the New York Federal Reserve based on data received from other sources, we have no control over its determination, calculation or publication.

The information contained in this section "Secured Overnight Financing Rate" is based upon the New York Federal Reserve's Website and other U.S. government sources.

Compounded SOFR Notes

Compounded SOFR notes will bear interest at an interest rate based on a compounded average of the Secured Overnight Financing Rate ("**SOFR**"), and any spread and/or spread multiplier and will be subject to the minimum interest rate and the maximum interest rate, if any.

The calculation agent will determine Compounded SOFR, the interest rate and accrued interest for each interest period in arrears as soon as reasonably practicable on or after the last day of the applicable observation

period, and in any event on or prior to the business day immediately preceding the relevant interest payment date, and will notify us of Compounded SOFR and such interest rate and accrued interest for each interest period as soon as reasonably practicable after such determination, but in any event by the business day immediately prior to the interest payment date.

Unless otherwise specified in the applicable pricing supplement, the "Observation Period" in respect of each interest period for a series of the notes will be the period from, and including, the date that is two U.S. Government Securities Business Days preceding the first date in such interest period to, but excluding, the date that is two U.S. Government Securities Business Days preceding the interest payment date for such interest period.

"**Compounded SOFR**" means, with respect to any applicable interest period, the rate of return of a daily compounded interest investment over the Observation Period corresponding to that interest period, calculated as follows:

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

" d_0 ", for any Observation Period, is the number of U.S. Government Securities Business Days in the relevant Observation Period.

"i" is a series of whole numbers from one to d₀, 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 the relevant Observation Period.

"SOFRi", for any U.S. Government Securities Business Day "i" in the relevant Observation Period, is a reference rate equal to SOFR in respect of that day.

"ni" for any U.S. Government Securities Business Day *"i"* is the number of calendar days from, and including, such U.S. Government Securities Business Day *"i"* to, but excluding, the following U.S. Government Securities Business Day *"i+1"*.

"d" is the number of calendar days in the relevant Observation Period.

For these calculations, the daily SOFR in effect on any U.S. Government Securities Business Day will be the applicable SOFR as reset on that date.

For purposes of determining Compounded SOFR, "**SOFR**" means, with respect to any U.S. Government Securities Business Day:

- (1) the Secured Overnight Financing Rate in respect of such U.S. Government Securities Business Day as published by the New York Federal Reserve, as the administrator of such rate (or a successor administrator), on the New York Federal Reserve's Website on or about 5:00 p.m. (New York City time) on the immediately following U.S. Government Securities Business Day; or
- (2) if the Secured Overnight Financing Rate in respect of such U.S. Government Securities Business Day does not appear as specified in paragraph (1), unless both a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, the Secured Overnight Financing Rate in respect of the last U.S. Government Securities Business Day for which such rate was published on the New York Federal Reserve's Website; or
- (3) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred:
 - 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 and (b) the Benchmark Replacement Adjustment; or

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

"Benchmark" means the Compounded SOFR as defined above; provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the Compounded SOFR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement.

"Benchmark Replacement" means the first alternative set forth in the order presented in clause (3) of the definition of "SOFR" that can be determined by us or our designee as of the Benchmark Replacement Date. In connection with the implementation of a Benchmark Replacement, we or our designee will have the right to make Benchmark Replacement Conforming Changes from time to time.

"Benchmark Replacement Adjustment" means the first alternative set forth in the order below that can be determined by us or our designee as of the Benchmark Replacement Date:

- (1) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) 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 us or our designee 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 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 and other administrative matters) that we or our designee decide may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if we or our designee decide that adoption of any portion of such market practice is not administratively feasible or if we or our designee determine that no market practice for use of the Benchmark Replacement exists, in such other manner as we or our designee determine 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 permanently or indefinitely ceases to provide the Benchmark; 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:

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

"**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.

"**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 excluding the applicable ISDA Fallback Adjustment.

"New York Federal Reserve" means the Federal Reserve Bank of New York.

"New York Federal Reserve's Website" means the website of the New York Federal Reserve, currently at http://www.newyorkfed.org, or any successor source.

"**Reference Time**" with respect to any determination of the Benchmark means the time determined by us or our designee 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.

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

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

If a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, any determination, decision or election that may be made by us or our designee pursuant to this section "Compounded SOFR," 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;

• will be made in our or our designee's sole discretion; and

notwithstanding anything to the contrary in the documentation relating to the notes, shall become effective without consent from the holders of the notes or any other party.

Interest and Principal Payments

Paying Agent

We have appointed Deutsche Bank Trust Company Americas, 60 Wall Street, New York, NY 10005 as our current paying agent for the notes. We may appoint one or more financial institutions to act as our paying agents at whose designated offices notes in certificated (*i.e.*, definitive) form may be surrendered for payment at their maturity. We may add, replace or terminate paying agents from time to time. We may also choose to act as our own paying agent. We will notify you of changes in the paying agents.

Payments of Interest

The paying agent will pay interest, if any, to the person in whose name the note is registered at the close of business on the applicable record date. However, upon maturity, redemption or repayment, the paying agent will pay any interest due to the person to whom it pays the principal of the note. The paying agent will make the payment of interest on the date of maturity, redemption or repayment, whether or not that date is an interest payment date. The paying agent will make the initial interest payment on a note on the first interest payment date falling after the date of issuance. However, if the period of time between the issue date and the first interest payment date, interest will not be paid on the first interest payment date, but will be paid on the second interest payment date.

Book-entry and other indirect owners should consult their banks or brokers for information on how they will receive payments on their notes.

Payment Procedures for Notes Denominated in U.S. Dollars

Payments on Global Notes. The paying agent will make payments of principal, premium, if any, and interest, if any, to the account of the Depositary, as holder of the global notes, by wire transfer of immediately available funds or transfer of other property. We expect that the Depositary, upon receipt of any payment, will immediately credit its participants' accounts in amounts proportionate to their respective beneficial interests in the global notes as shown on the records of the Depositary. We also expect that payments by the Depositary's participants to owners of beneficial interests in the global notes will be governed by standing customer instructions and customary practices and will be the responsibility of those participants.

Payments on Certificated Notes. The paying agent will make U.S. dollar payments on the notes as follows:

- the principal, premium (if any) or interest (if any) due at maturity or, if applicable, earlier redemption or repayment, shall be paid in immediately available funds or transfer of other property only upon presentation of such certificated note at the corporate trust office of the paying agent;
- the interest (if any) due on each interest payment date (other than interest payable at maturity, early redemption or repayment) shall be paid by check mailed to the record holder of such certificated note on the record date; or
- for holders of the equivalent of at least U.S. \$10,000,000 in aggregate principal amount of certificated notes (having identical tenor and terms), the interest shall be paid on each interest payment date by wire transfer of immediately available funds, if appropriate wire transfer instructions have been received by the paying agent not less than 16 days prior to such interest payment date.

Payment Procedures for Notes Denominated in a Foreign Currency

Payments on Global Notes. While we anticipate making payments of principal, premium, if any, and interest, if any, on most debt securities in U.S. dollars, some debt securities may be payable in foreign currencies as specified in the applicable pricing supplement. Currently, few facilities exist in the United States to convert U.S. dollars into foreign currencies and vice versa. In addition, most U.S. banks do not offer non-U.S. dollar

denominated checking or savings account facilities. Accordingly, unless alternative arrangements are made, we will pay principal, premium, if any, and interest, if any, on debt securities that are payable in a foreign currency to an account at a bank outside the United States, which, in the case of a debt security payable in euro, will be made by credit or transfer to a euro account specified by the payee in a country for which the euro is the lawful currency.

Payments on Certificated Notes. Payments made by us on foreign currency notes will be made in U.S. dollars, unless otherwise specified in the applicable pricing supplement or unless the holder elects to receive payments in the specified currency (if this right is set forth in the applicable pricing supplement). If so specified, a holder may elect to receive payment in the specified currency for certain specified payments or all payments (in which case a holder would no longer need to file a separate election for each payment). To make such an election, the paying agent must receive a written request from the holder:

- · for payments of interest, on a date prior to the record date for the relevant interest payment date; or
- for payments of principal, at least 10 calendar days prior to the maturity date (or any redemption date or repayment date); *provided*, that any such election is irrevocable as to the next succeeding payment to which it relates. If such election is made as to full payment on a note, the election may thereafter be revoked so long as the paying agent is notified of the revocation within the time period set forth above.

Banks in the United States offer non-U.S. dollar-denominated checking or savings account facilities in the United States only on a limited basis. Accordingly, unless otherwise indicated in the applicable pricing supplement, payments of principal of, premium (if any) and interest (if any) on foreign currency notes to be made in a specified currency other than U.S. dollars will be made to an account at a bank outside the United States that is acceptable to both us and the paying agent, unless we agree to alternative arrangements.

Indirect holders (including those who hold notes in street name) should consult their banks or broker-dealers for information on how to request payment in the specified currency and to ascertain the deadline for giving instructions to them in order to ensure that timely notice will be delivered to the paying agent.

If the holder does not elect to be paid in the specified currency, we will make payments in U.S. dollars as follows:

- the principal, premium (if any) or interest (if any) due at maturity or, if applicable, earlier redemption or repayment, shall be paid in immediately available funds only upon presentation of such certificated note at the corporate trust office of the paying agent;
- the interest (if any) due on each interest payment date (other than interest payable at maturity, early redemption or repayment) shall be paid by check mailed to the record holder of such certificated note on the record date; or
- for holders of the equivalent of at least U.S. \$10,000,000 in one or more foreign currencies or currency units in aggregate principal amount of certificated notes (having identical tenor and terms), the interest shall be paid on each interest payment date by wire transfer of immediately available funds, if appropriate wire transfer instructions have been received by the paying agent not less than 16 days prior to such interest payment date.

Determination of Exchange Rate for Payments in U.S. Dollars for Notes Denominated in a Foreign Currency. Deutsche Bank AG, London Branch, will act as exchange rate agent and convert the specified currency into U.S. dollars for holders who will be receiving payments in U.S. dollars rather than the specified currency. Unless otherwise provided in the applicable pricing supplement, the conversion will be based on the highest bid quotation in The City of New York received by the exchange rate agent at approximately 11:00 A.M., New York City time, on the second business day preceding the applicable payment date from three recognized foreign exchange dealers for the purchase by the quoting dealer:

- of the specified currency for U.S. dollars for settlement on the payment date;
- in the aggregate amount of the specified currency payable to those holders or beneficial owners of notes; and
- at which the applicable dealer commits to execute a contract.

One of the dealers providing quotations may be the exchange rate agent, even if such agent is an affiliate of ours. If those bid quotations are not available, payments will be made in the specified currency. The holders or beneficial owners of notes will pay all currency exchange costs by deductions from the amounts payable on the notes.

Adoption of Euro. If a country that is or becomes a member state of the European Union decides to participate in Stage III of the European Economic and Monetary Union (EMU) and adopts or has adopted the euro, then all payment amounts in respect of notes denominated or payable in the currency of such country will be calculated in euro in conformity with legally applicable measures taken pursuant to, or by virtue of, applicable law, and such payment will not constitute an event of default under the Indenture or the notes. However, a holder will receive actual payment on such notes in U.S. dollars instead of euro, as described in "—Payment on Global Notes" and "—Payment on Certificated Notes" above, unless the appropriate election is made to receive the payment in the specified currency.

Unavailability of Foreign Currency. The relevant specified currency may not be available to us for making payments of principal of, premium on (if any) or interest (if any) on any note. This could occur (a) due to the imposition of exchange controls or other circumstances beyond our control; (b) if a currency unit is no longer used for the purposes for which it was established; or (c) if the specified currency is no longer used by the government of the country issuing that currency or by public institutions within the international banking community for the settlement of transactions, in each such case as determined in good faith by us.

Except with respect to notes denominated or payable in currencies of existing members of, or candidate countries to the European Union, that subsequently adopt the euro (as described in "—Adoption of Euro" above), if the specified currency is unavailable, we may satisfy our obligations to holders of the notes by making those payments on the date of payment in U.S. dollars or such foreign currency or currency unit as may be specified in the applicable pricing supplement. This "substitute currency" will become the currency of payment on each payment date occurring after the last date on which the specified currency was available, which we refer to as the "conversion date" (but such specified currency will, at our election, resume being the currency of payment on the first such payment date preceded by 15 business days during which the circumstances which gave rise to the change of currency no longer prevail, in each case, as determined in good faith by us).

The substitute currency amount to be paid by us to the paying agent and by the paying agent to the holder of a note with respect to such payment date will be the currency equivalent or currency unit equivalent (each as defined below) of the specified currency as determined by the exchange rate agent (which determination will be delivered in writing to the paying agent not later than the fifth business day prior to the applicable payment date) as of the conversion date or, if later, the date most recently preceding the payment date in question on which such determination is possible of performance, but not more than 15 business days before such payment date. Such conversion date or date preceding a payment date is referred to as the "**substitute currency valuation date**." Any payment in a substitute currency under the circumstances described above will not constitute an event of default under the notes.

The "currency equivalent" will be determined by the exchange rate agent as of each substitute currency valuation date and will be obtained by converting the specified currency (unless the specified currency is a currency unit) into the substitute currency at the market exchange rate (as defined below) on the substitute currency valuation date.

The "**currency unit equivalent**" will be determined by the exchange rate agent as of each substitute currency valuation date and will be the sum obtained by adding together the results obtained by converting the specified amount of each initial component currency into the substitute currency at the market exchange rate on the substitute currency valuation date for such component currency.

"**Component currency**" means any currency which, on the conversion date, was a component currency of the relevant currency unit.

"Market exchange rate" means, as of any date, for any specified currency (including any currency unit), the noon buying rate for such currency in New York City for cable transfers payable in foreign currencies, as reported by the Federal Reserve Bank of New York. If the market exchange rate is not available for any reason with respect to one or more currencies or currency units for which an exchange rate is required, the exchange rate agent will use, in its sole discretion and without liability on its part, such quotation of the Federal Reserve Bank of New York as of the most recent available date, or quotations from one or more major banks in New York City or in the country of issue of the currency or currency unit in question, or such other quotations as the exchange rate agent shall deem appropriate. If there is more than one market for dealing in any currency or currency unit by

reason of foreign exchange regulations or otherwise, the market to be used in respect of such currency or currency unit will be that upon which a non-resident issuer of securities designated in such currency or currency unit would, as determined in its sole discretion and without liability on the part of the exchange rate agent, purchase such currency or currency unit in order to make payments in respect of such securities.

"Specified amount" of a component currency means the number of units (including decimals) which such component currency represented in the relevant currency unit, on the conversion date or the substitute currency valuation date or the last date the currency unit was so used, whichever is later. If after such date the official unit of any component currency is altered by way of combination or subdivision, the specified amount of such component currency will be divided or multiplied in the same proportion. If after such date two or more component currencies are consolidated into a single currency, the respective specified amounts of such component currencies will be replaced by an amount in such single currency equal to the sum of the respective specified amount will thereafter be a specified amount and such single currency will thereafter be a component currency. If after such date any component currency will be divided into two or more currencies, the specified amount of such component currency will be replaced by specified amounts of such two or more currencies, the sum of which, at the market exchange rate of such two or more currencies on the date of such replacement, will be equal to the specified amount of such component currency will thereafter be a specified amount and such such currencies on the date of such replacement, will be equal to the sum of which, at the market exchange rate of such two or more currencies on the date of such replacement, will be equal to the specified amount of such former component currency and such amounts will thereafter be specified amounts and such such expecified amounts will thereafter be specified amounts and such currencies.

All determinations referred to above made by us will be at our sole discretion and will, in the absence of manifest error, be conclusive for all purposes and binding on holders.

Exchange Rate Agent. If we issue a note in a specified currency other than U.S. dollars, we will appoint a financial institution to act as the exchange rate agent. Unless otherwise specified in the applicable pricing supplement, the exchange rate agent will be Deutsche Bank AG, London Branch. We may change the exchange rate agent from time to time after the original issue date of the note without your consent and without notifying you of the change.

All determinations made by the exchange rate agent will be at its sole discretion unless we state in a pricing supplement that any determination is subject to our approval. In the absence of manifest error, those determinations will be conclusive for all purposes and binding on you and us, without any liability on the party of the exchange rate agent.

Redemptions and Repurchases of Notes

Optional Redemption. Unless otherwise indicated in the applicable pricing supplement, the notes will not be redeemable prior to maturity. If redemption is provided for in the applicable pricing supplement, we will have the option to redeem a note on and after the date, if any, fixed at the time of sale, which we refer to as the initial redemption date. Unless otherwise specified in the applicable pricing supplement, on and after a note's initial redemption date, we will have the option to redeem such note in whole or in part in increments of \$1,000 principal amount (or, if such note is denominated in a foreign currency, in such other amount in one or more foreign currencies or currency units as shall be set forth in the applicable pricing supplement) at a redemption price determined in accordance with the following, together with accrued and unpaid interest, if any, payable on the date of redemption.

Unless otherwise specified in the applicable pricing supplement, the redemption price for each note or part thereof subject to redemption shall be:

- (i) in the case of an interest-bearing note, the principal amount of such note or part thereof redeemed, or
- (ii) in the case of a non-interest-bearing note, an amount equal to the issue price thereof plus accrued original issue discount to the redemption date,

multiplied in each case by an initial redemption percentage, which shall be the percentage set forth in the applicable pricing supplement, of, in the case of a non-interest-bearing note, the face amount (and in the case of an interest-bearing note, the principal amount) of such note and, if applicable, shall decline on each anniversary of the initial redemption date by the annual redemption percentage reduction set forth in the applicable pricing supplement; *provided, however*, that in no event shall the redemption price be less than 100% of such principal amount or face amount, as the case may be, unless otherwise specified in the applicable pricing supplement. The initial redemption percentage and any annual redemption percentage reduction with respect to each note subject to redemption prior to maturity will be fixed at the time of sale and set forth in the applicable pricing supplement.

We will mail a notice of redemption to each holder by first-class mail, postage prepaid, at least 30 calendar days and not more than 60 calendar days prior to the date fixed for redemption, or within the redemption notice period designated in the applicable pricing supplement, to the address of each holder as that address appears upon the books maintained by the paying agent.

Repayment at Option of Holder. If applicable, the pricing supplement relating to each note will indicate that the holder has the option to have us repay the note on one or more optional repayment dates specified prior to its maturity date. Unless otherwise specified in the applicable pricing supplement, the repayment price will be equal to 100% of the principal amount of the note, together with accrued interest to the date of repayment. For notes issued with original issue discount, the repayment price is described under "Description of Notes—Types of Notes—Original Issue Discount Notes."

Unless otherwise specified in the applicable pricing supplement, for us to repay a note, the paying agent must receive the following at least 30 days but not more than 60 days prior to the repayment date:

- the note with the form entitled "Option to Elect Repayment" (as included in the applicable pricing supplement); or
- a telegram, telex, facsimile transmission or a letter from a member of a national securities exchange or FINRA, or from a commercial bank or trust company in the United States, setting forth the name of the holder of the note, the principal amount of the note, the principal amount of the note to be repaid, the certificate number or a description of the tenor and terms of the note, a statement that the option to elect repayment is being exercised and a guarantee that the note to be repaid, together with the duly completed form entitled "Option to Elect Repayment," with any unmatured coupons will be received by the paying agent not later than the fifth business day after the date of that telegram, telex, facsimile transmission or letter. However, the telegram, telex, facsimile transmission or letter will only be effective if that note and form duly completed are received by the paying agent by the fifth business day after the date of that telegram, telex, facsimile transmission or letter.

Exercise of the repayment option by the holder of a note will be irrevocable. The holder may exercise the repayment option for less than the entire principal amount of the note but, in that event, the principal amount of the note remaining outstanding after repayment must be an authorized denomination.

Special Requirements for Optional Repayment of Global Notes. If a note is represented by a global note, the Depositary or the Depositary's nominee will be the holder of the note and therefore will be the only entity that can exercise a right to repayment. In order to ensure that the Depositary's nominee will timely exercise a right to repayment of a particular note, the beneficial owner of the note must instruct the broker or other direct or indirect participant through which it holds an interest in the note to notify the Depositary of its desire to exercise a right to repayment. Different firms have different cut-off times for accepting instructions from their customers and, accordingly, each beneficial owner should consult the broker or other direct or indirect participant through which it holds an interest in the cut-off time by which an instruction must be given in order for timely notice to be delivered to the Depositary.

Street name and other indirect owners should contact their banks or brokers for information about how to exercise a repayment right in a timely manner.

Open Market Purchases. We or our affiliate may, at any time and from time to time, purchase notes at any price by tender, in open market transactions or private agreement. Notes so purchased by us may, at our discretion, be held or resold or surrendered to the trustee for cancellation.

Form, Exchange and Transfer

Certificated (*i.e.*, definitive) notes may be registered or transferred at the office of Deutsche Bank Trust Company Americas, 60 Wall Street, New York, New York, 10005, as our current transfer agent for the transfer and exchange of the notes. If a note is issued as a global note, only the depositary will be entitled to transfer and exchange the note as described in this subsection, because it will be the only holder of the note. Global notes may be transferred and exchanged only in the manner and to the extent set forth under "Forms of Securities— Global Securities" in the accompanying prospectus.

Transfer Agent. We may appoint entities other than, or in addition to, the trustee to perform the functions of a transfer agent, or we may perform them ourselves. We may cancel the appointment of any particular transfer

agent. We may also approve a change in the office through which any transfer agent acts. If we have designated additional transfer agents for a particular note, they will be named in the applicable pricing supplement.

Redemptions and Repurchases. We will not be required to:

- register the transfer or exchange of any note if the holder has exercised the holder's right, if any, to require us to repurchase the note, in whole or in part, except the portion of the note not required to be repurchased;
- register the transfer or exchange of notes to be redeemed for a period of fifteen calendar days preceding the mailing of the relevant notice of redemption; or
- register the transfer or exchange of any registered note selected for redemption in whole or in part, except the unredeemed or unpaid portion of that registered note being redeemed in part.

Charges. No service charge will be made for any registration or transfer or exchange of notes, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with the registration of transfer or exchange of notes.

Replacement of Notes

At the expense of the holder, we may, in our discretion, replace any notes that become mutilated, destroyed, lost or stolen or are apparently destroyed, lost or stolen. The mutilated notes must be delivered to the trustee, the paying agent and the registrar or satisfactory evidence of the destruction, loss or theft of the notes must be delivered to us, the paying agent, the registrar and the trustee. At the expense of the holder, an indemnity that is satisfactory to us, the principal paying agent, the registrar, in the case of registered notes, and the trustee may be required before a replacement note will be issued.

THE DEPOSITARY

The Depository Trust Company, New York, New York will be designated as the depositary for any registered global note. Each registered global note will be registered in the name of Cede & Co., the Depositary's nominee.

What Is the Depositary? The Depositary is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Depositary holds and provides asset servicing for securities deposited with it by its direct participants. The Depositary also facilitates the post-trade settlement of transactions among its direct participants in those securities through electronic computerized book-entry changes in participants' accounts, eliminating the need for physical movement of securities certificates. The Depositary's direct participants include both U.S. and non-U.S. securities brokers and dealers, including the agents, banks, trust companies, clearing corporations and other organizations, some of whom and/or their representatives own the Depositary. Access to the Depositary's book-entry system is also available to others, including both U.S. and non-U.S. brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a participant, either directly or indirectly. The rules applicable to the Depositary and its participants are on file with the SEC.

Beneficial Ownership Interests and the Depositary's Book-Entry System. Purchases of the notes under the Depositary's system must be made by or through its direct participants, which will receive a credit for the notes on the Depositary's records. The ownership interest of each actual purchaser of each note (the "**beneficial owner**") is in turn to be recorded on the records of direct and indirect participants. Beneficial owners will not receive written confirmation from the Depositary of their purchase, but beneficial owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the direct or indirect participants through which the beneficial owner entered into the transaction. Transfers of ownership interests in the notes are to be made by entries on the books of direct and indirect participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in notes, except in the event that use of the book-entry system for the notes is discontinued.

To facilitate subsequent transfers, all notes deposited with the Depositary are registered in the name of Cede & Co., or such other name as may be requested by the Depositary. The deposit of notes with the Depositary and their registration in the name of Cede & Co. or such other nominee of the Depositary do not effect any change in beneficial ownership. The Depositary has no knowledge of the actual beneficial owners of the notes; the Depositary's records reflect only the identity of the direct participants to whose accounts the notes are credited, which may or may not be the beneficial owners. The participants will remain responsible for keeping account of their holdings on behalf of their customers.

Notices and Communications. Conveyance of notices and other communications by the Depositary to direct participants, by direct participants to indirect participants and by direct participants and indirect participants to beneficial owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Voting. Neither the Depositary nor Cede & Co. (nor such other nominee of the Depositary) will consent or vote with respect to the notes unless authorized by a direct participant in accordance with the Depositary's procedures. Under its usual procedures, the Depositary mails an omnibus proxy to us as soon as possible after the applicable record date. The omnibus proxy assigns Cede & Co.'s consenting or voting rights to those direct participants identified in a listing attached to the omnibus proxy to whose accounts the notes are credited on the record date.

Payments. Redemption proceeds, distributions and other payments on the notes will be made to Cede & Co. or such other nominee as may be requested by the Depositary. The Depositary's practice is to credit direct participants' accounts upon the Depositary's receipt of funds or other property and corresponding detail information from us or any agent of ours, on the date payable in accordance with their respective holdings shown on the Depositary's records. Payments by participants to beneficial owners will be governed by standing instructions and customary practices and will be the responsibility of such participant and not of the Depositary or its nominee, the trustee, any agent of ours, or us, subject to any statutory or regulatory requirements that may be in effect from time to time. Payments of redemption proceeds, distributions and other payments to Cede & Co. or such other nominee as may be requested by the Depositary are our responsibility or the responsibility of any paying agent of ours, disbursement of such payments to direct participants will be the responsibility of the

Depositary and disbursement of such payments to the beneficial owners will be the responsibility of direct and indirect participants.

Discontinuance of the Depositary. The Depositary may discontinue providing its services as depositary with respect to the notes at any time by giving reasonable notice to us or our agent. Under such circumstances, in the event that a successor depositary is not obtained by us within 90 days, security certificates are required to be printed and delivered. See "Forms of Securities—Global Securities" in the accompanying prospectus.

We may decide to discontinue use of the system of book-entry transfers through the Depositary or any successor depositary. In that event, security certificates will be printed and delivered. See "Forms of Securities— Global Securities" in the accompanying prospectus.

According to the Depositary, the foregoing information relating to the Depositary has been provided to the financial community for informational purposes only and is not intended to serve as a representation, warranty or contract modification of any kind. The information in this section concerning the Depositary and its book-entry system has been obtained from sources we believe to be reliable, but we have not independently verified the accuracy thereof. The Depositary may change or discontinue the foregoing procedures at any time. See "Forms of Securities" in the accompanying prospectus for additional information about the form of notes.

SERIES A NOTES OFFERED ON A GLOBAL BASIS

If we offer any of the notes under our Series A program on a global basis, we will so specify in the applicable pricing supplement. The additional information contained in this section under "—Book Entry, Delivery and Form" and "—Global Clearance and Settlement Procedures" will apply to every offering on a global basis. The additional provisions described under "—Tax Redemption" and "—Payment of Additional Amounts" will apply to notes offered on a global basis only if we so specify in the applicable pricing supplement. We have obtained the information in this section concerning Clearstream, Luxembourg and the Euroclear operator, and the book-entry system and procedures from sources that we believe to be reliable, but we have not independently verified the accuracy of this information.

Book-Entry, Delivery and Form

The notes will be issued in the form of one or more fully registered global notes which will be deposited with, or on behalf of, the Depositary and registered in the name of Cede & Co., the Depositary's nominee. Beneficial interests in the registered global notes will be represented through book-entry accounts of financial institutions acting on behalf of beneficial owners as direct and indirect participants in the Depositary. If specified in the applicable pricing supplement, investors may elect to hold interests in the registered global notes held by the Depositary through Clearstream, Luxembourg or the Euroclear operator if they are participants in those systems, or indirectly through organizations which are participants in those systems. Clearstream, Luxembourg and the Euroclear operator will hold interests on behalf of their participants through customers' securities accounts in Clearstream, Luxembourg's and the Euroclear operator's names on the books of their respective U.S. depositaries, which in turn will hold such interests in the registered global notes in customers' securities accounts in the U.S. depositaries' names on the books of the Depositary. Citibank N.A. will act as depositary for Clearstream, Luxembourg and JPMorgan Chase Bank, N.A. will act as depositary for the Euroclear operator. We refer to each of Citibank, N.A. and JPMorgan Chase Bank, N.A., acting in this depositary capacity, as the "U.S. depositary" for the relevant clearing system. Except as set forth below, the registered global notes may be transferred, in whole but not in part, only to the Depositary, another nominee of the Depositary or to a successor of the Depositary or its nominee.

Clearstream, Luxembourg has advised us that it is incorporated under the laws of Luxembourg as a société anonyme and is subject to regulation by the Luxembourg Commission for the Supervision of the Financial Sector (Commission de Surveillance du Secteur Financier). Clearstream, Luxembourg is owned by Deutsche Börse AG, a publicly traded company. Clearstream, Luxembourg holds securities for its participating customers, "Clearstream, Luxembourg customers," and facilitates the clearance and settlement of securities transactions between Clearstream, Luxembourg customers through electronic book-entry transfers between their accounts, thereby eliminating the need for physical movement of securities. Clearstream, Luxembourg provides other services to Clearstream, Luxembourg customers, including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Clearstream, Luxembourg interfaces with domestic securities markets in many countries through established depository and custodial relationships. Clearstream, Luxembourg customers include worldwide securities brokers and dealers, banks, trust companies and clearing corporations and may include professional financial intermediaries. Clearstream, Luxembourg's U.S. participating customers are limited to securities brokers, dealers and banks. Indirect access to Clearstream, Luxembourg is also available to other institutions such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Clearstream, Luxembourg customer. Clearstream, Luxembourg is an indirect participant in the Depositary. Clearstream, Luxembourg has established an electronic bridge with the Euroclear operator to facilitate settlement of trades between Clearstream. Luxembourg and the Euroclear operator.

Distributions with respect to the notes held through Clearstream, Luxembourg will be credited to cash accounts of Clearstream, Luxembourg customers in accordance with its rules and procedures, to the extent received by the U.S. depositary for Clearstream, Luxembourg.

The Euroclear operator has advised us that the Euroclear System was created in 1968 to hold securities for its participants, "Euroclear participants," and to clear and settle transactions between Euroclear participants through simultaneous electronic book-entry delivery against payment, thereby eliminating the need for physical movement of securities. The Euroclear System is operated by Euroclear Bank SA/NV (the "**Euroclear operator**"), under contract with Euroclear plc, a U.K. corporation. The Euroclear operator conducts all operations, and all Euroclear securities clearance accounts and Euroclear cash accounts are accounts with the Euroclear operator, not Euroclear plc. Euroclear plc establishes policies for the Euroclear operator on behalf of Euroclear participants. The Euroclear operator is a bank incorporated under the laws of the Kingdom of Belgium. The

Euroclear operator is regulated and examined by the Belgian Financial Services and Markets Authority and the National Bank of Belgium.

The Euroclear operator holds securities and book-entry interests in securities for participating organizations and facilitates the clearance and settlement of securities transactions between Euroclear participants and between Euroclear participants and participants of certain other securities intermediaries through electronic bookentry changes in accounts of such participants or other securities intermediaries. Euroclear participants include securities brokers and dealers, banks (including central banks), trust companies and clearing corporations and other professional financial intermediaries. Indirect access to Euroclear is also available to other institutions such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Euroclear participant. Euroclear is an indirect participant in the Depositary.

The Euroclear operator provides Euroclear participants with, among other things, safekeeping, administration, clearance and settlement, securities lending and borrowing and related services.

Non-participants of Euroclear may acquire, hold and transfer book-entry interests in notes through accounts with a direct participant of Euroclear or any other securities intermediary that holds a book-entry interest in the notes through one or more securities intermediaries standing between such other securities intermediary and the Euroclear operator.

Securities clearance accounts and cash accounts with the Euroclear operator are governed by the Terms and Conditions Governing Use of Euroclear and the related Operating Procedures of the Euroclear System, and applicable Belgian law, collectively, the "terms and conditions." The terms and conditions govern transfers of securities and cash within the Euroclear System, withdrawals of securities and cash from the Euroclear System and receipts of payments with respect to securities in the Euroclear System. All securities in the Euroclear System are held on a fungible basis without attribution of specific certificates to specific securities clearance accounts. The Euroclear operator acts under the terms and conditions only on behalf of Euroclear participants and has no record of or relationship with persons holding through Euroclear participants.

Distributions with respect to the notes held beneficially through the Euroclear System will be credited to the cash accounts of Euroclear participants in accordance with the terms and conditions, to the extent received by the U.S. depositary for the Euroclear operator.

Although the Euroclear operator has agreed to the procedures provided below in order to facilitate transfers of securities among Euroclear participants and between Euroclear participants and participants of other intermediaries, it is under no obligation to perform or continue to perform in accordance with such procedures, and such procedures may be modified or discontinued at any time.

Investors electing to acquire securities through an account with the Euroclear operator or some other securities intermediary must follow the settlement procedures of such an intermediary with respect to the settlement of new issues of securities. Investors electing to acquire, hold or transfer securities through an account with the Euroclear operator or some other securities intermediary must follow the settlement procedures of such an intermediary with respect to the an intermediary with respect to the settlement of securities intermediary must follow the settlement procedures of such an intermediary with respect to the settlement of secondary market transactions of such securities.

Investors who are Euroclear participants may acquire, hold or transfer interests in securities by book-entry to accounts with the Euroclear operator. Investors who are not Euroclear participants may acquire, hold or transfer interests in securities by book-entry to accounts with a securities intermediary who holds a book-entry interest in these securities through accounts with Euroclear.

The Euroclear operator further advises that investors that acquire, hold and transfer interests in securities by book-entry through accounts with the Euroclear operator or any other securities intermediary are subject to the laws and contractual provisions governing their relationship with their intermediary, as well as the laws and contractual provisions governing the relationship between their intermediary and each other intermediary, if any, standing between themselves and the securities.

The Euroclear operator further advises that, under Belgian law, investors that are credited with securities on the records of the Euroclear operator have a co-property right in the fungible pool of interests in securities on deposit with the Euroclear operator in an amount equal to the amount of interests in securities credited to their accounts. In the event of the insolvency of the Euroclear operator, Euroclear participants would have a right under Belgian law to the return of the amount and type of interests in securities credited to their accounts with the Euroclear operator. If the Euroclear operator does not have a sufficient amount of interests in securities on deposit of a particular type to cover the claims of all participants credited with interests in securities of that type on

the Euroclear operator's records, all participants having an amount of interests in securities of that type credited to their accounts with the Euroclear operator will have the right under Belgian law to the return of their pro rata share of the amount of interests in securities actually on deposit.

Under Belgian law, the Euroclear operator is required to pass on the benefits of ownership in any interests in securities on deposit with it (such as dividends, voting rights and other entitlements) to any person credited with those interests in securities on its records.

Individual certificates in respect of the notes will not be issued in exchange for the registered global notes, except in very limited circumstances. If the Depositary notifies us that it is unwilling or unable to continue as a clearing system in connection with the registered global notes or ceases to be a clearing agency registered under the Exchange Act, and a successor clearing system is not appointed by us within 90 days after receiving that notice from the Depositary or upon becoming aware that the Depositary is no longer so registered, we will issue or cause to be issued individual certificates in registered form on registration of transfer of, or in exchange for, book-entry interests in the notes represented by registered global notes upon delivery of those registered global notes for cancellation.

Title to book-entry interests in the notes will pass by book-entry registration of the transfer within the records of Clearstream, Luxembourg, the Euroclear operator or the Depositary, as the case may be, in accordance with their respective procedures. Book-entry interests in the notes may be transferred within Clearstream, Luxembourg and within the Euroclear System and between Clearstream, Luxembourg and the Euroclear System in accordance with procedures established for these purposes by Clearstream, Luxembourg and the Euroclear operator. Book-entry interests in the notes may be transferred within the Depositary in accordance with procedures established for these purposes by Clearstream, Luxembourg and the Euroclear operator. Book-entry interests in the notes may be transferred within the Depositary in accordance with procedures established for this purpose by the Depositary. Transfers of book-entry interests in the notes among Clearstream, Luxembourg and the Euroclear operator and the Depositary may be effected in accordance with procedures established for this purpose by Clearstream, Luxembourg, the Euroclear operator and the Depositary.

A further description of the Depositary's procedures with respect to the registered global notes is set forth in this prospectus supplement under "The Depositary." The Depositary has confirmed to us, DBSI, DBTCA and the trustee that it intends to follow those procedures.

Global Clearance and Settlement Procedures

Initial settlement for the notes offered on a global basis will be made in immediately available funds. Secondary market trading between the Depositary's participants will occur in the ordinary way in accordance with the Depositary's rules and will be settled in immediately available funds using the Depositary's Same-Day Funds Settlement System. Secondary market trading between Clearstream, Luxembourg customers and/or Euroclear participants will occur in the ordinary way in accordance with the applicable rules and operating procedures of Clearstream, Luxembourg and the Euroclear System and will be settled using the procedures applicable to conventional Eurobonds in immediately available funds.

Cross-market transfers between persons holding directly or indirectly through the Depositary on the one hand, and directly or indirectly through Clearstream, Luxembourg customers or Euroclear participants, on the other, will be effected through the Depositary in accordance with the Depositary's rules on behalf of the relevant European international clearing system by its U.S. depositary; however, these cross-market transactions will require delivery of instructions to the relevant European international clearing system by its rules and procedures and within its established deadlines (European time). The relevant European international clearing system will, if the transaction meets its settlement requirements, deliver instructions to its U.S. depositary to take action to effect final settlement on its behalf by delivering interests in the notes to or receiving interests in the notes from the Depositary, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to the Depositary. Clearstream, Luxembourg customers and Euroclear participants may not deliver instructions directly to their respective U.S. depositaries.

Because of time-zone differences, credits of interests in the notes received in Clearstream, Luxembourg or the Euroclear System as a result of a transaction with a Depositary participant will be made during subsequent securities settlement processing and dated the business day following the Depositary settlement date. Credits of interests or any transactions involving interests in the notes received in Clearstream, Luxembourg or the Euroclear System as a result of a transaction with a Depositary participant and settled during subsequent securities settlement processing will be reported to the relevant Clearstream, Luxembourg customers or Euroclear participants on the business day following the Depositary settlement date. Cash received in Clearstream, Luxembourg or the Euroclear System as a result of sales of interests in the notes by or through a Clearstream,

Luxembourg customer or a Euroclear participant to a Depositary participant will be received with value on the Depositary settlement date but will be available in the relevant Clearstream, Luxembourg or Euroclear cash account only as of the business day following settlement in the Depositary.

Although the Depositary, Clearstream, Luxembourg and the Euroclear operator have agreed to the foregoing procedures in order to facilitate transfers of interests in the notes among participants of the Depositary, Clearstream, Luxembourg and Euroclear, they are under no obligation to perform or continue to perform the foregoing procedures and these procedures may be changed or discontinued at any time.

Tax Redemption

If specified in the applicable pricing supplement, we may redeem, in whole but not in part, any of the notes under our Series A program offered on a global basis at our option at any time prior to maturity, upon the giving of a notice of tax redemption as described below, if we determine that, as a result of:

- any change in or amendment to the laws, or any regulations or rulings promulgated under the laws of a relevant jurisdiction (as defined below), or of any political subdivision or taxing authority thereof or therein affecting taxation; or
- any change in official position regarding the application or interpretation of the laws, regulations or rulings referred to above, which change or amendment becomes effective or, in the case of a change in official position, is announced, on or after the date of the applicable pricing supplement,

we have or will become obligated to pay additional amounts, as defined below under "—Payment of Additional Amounts," with respect to any of those notes as described below under "—Payment of Additional Amounts." The redemption price will be equal to 100% of the principal amount of the notes, except as otherwise specified in the applicable pricing supplement, "Description of Notes—Original Issue Discount Notes," or "Description of Notes—Exchangeable Notes—Payments upon Acceleration of Maturity or upon Tax Redemption," together with any accrued interest to the date fixed for redemption.

Prior to the giving of any notice of tax redemption, we will deliver to the trustee:

- a certificate stating that we are entitled to effect the redemption and setting forth a statement of facts showing that the conditions precedent to our right to so redeem have occurred; and
- an opinion of independent legal counsel satisfactory to the trustee to the effect that we are entitled to effect the redemption based on the statement of facts set forth in the certificate;

provided that no notice of tax redemption may be given earlier than 60 days prior to the earliest date on which we would be obligated to pay the additional amounts if a payment in respect of the notes were then due.

Notice of tax redemption will be given not less than 30 calendar days nor more than 60 calendar days prior to the date fixed for redemption, which date and the applicable redemption price will be specified in the notice. Notice will be given in accordance with "—Notices" below.

The term "**relevant jurisdiction**" as used herein means Germany, the United States or the jurisdiction of residence or incorporation of any successor corporation to the Bank and the jurisdiction of any relevant issuing branch.

Payment of Additional Amounts

All interest amounts payable in respect of the notes will be made without deduction or withholding for or on account of any present or future taxes, duties or governmental charges of any nature whatsoever imposed or levied by way of deduction or withholding by or on behalf of the tax jurisdiction ("withholding taxes"), unless such deduction or withholding is required by law.

"tax jurisdiction" means the Federal Republic of Germany or the United States, or any political subdivision or any authority thereof or therein having power to tax.

In the event of such withholding or deduction on payments of interest (but not in respect of the payment of any principal in respect of the notes) and if (but only if) specified in the applicable pricing supplement, we will, to the fullest extent permitted by law, pay such additional amounts ("**additional amounts**") as will be necessary in order that the net amounts received by the holders, after such withholding or deduction for or on account of any

withholding taxes imposed upon or as a result of such payment by the tax jurisdiction, will equal the respective amounts which would otherwise have been receivable in the absence of such withholding or deduction; except that no such additional amounts shall be payable on account of any taxes, duties or governmental charges which:

- are payable by any person acting as custodian bank or collecting agent on your or the beneficial owner's behalf, or otherwise in any manner which does not constitute a deduction or withholding by us from payments of interest made by us; or
- would not be payable to the extent such deduction or withholding could be avoided or reduced if you or the beneficial owner of the notes (or any financial institution through which you hold or the beneficial owner holds the notes or through which payment on the notes is made) (i) makes a declaration of non-residence or other similar claim for exemption to the relevant tax authority or complies with any reasonable certification, documentation, information or other reporting requirement imposed by the relevant tax authority or (ii) enters into or complies with any applicable certification, identification, information, documentation, or other reporting requirement or agreement concerning accounts maintained by you or the beneficial owner (or such financial institution) or concerning your or the beneficial owner's (or financial institution's) ownership or connection with the jurisdiction imposing such tax; or
- are payable by reason of your or the beneficial owner's having, or having had, some personal or business connection with the tax jurisdiction and not merely by reason of the fact that payments in respect of the notes are, or for purposes of taxation are deemed to be, derived from sources in, or are secured in, the tax jurisdiction; or
- are presented for payment more than 30 days after the relevant date (as defined below) except to the
 extent that you or the beneficial owner would have been entitled to additional amounts on presenting the
 same for payment on the last day of the period of 30 days assuming that day to have been a business
 day; or
- are deducted or withheld by a paying agent from a payment if the payment could have been made by another paying agent without such deduction or withholding; or
- would not be payable if the notes had been kept in safe custody with, and the payments had been collected by, a banking institution; or
- are payable by reason of a change in law or practice that becomes effective more than 30 days after the relevant payment of interest becomes due, or is duly provided for and notice thereof is given in accordance with the Indenture, whichever occurs later.

No additional amounts or any other amounts shall be payable on account of any such withholding or deduction in respect of payments of principal.

"**Relevant date**" means the date on which the payment first becomes due but, if the full amount payable has not been received by the paying agent on or before the due date, it means the date on which, the full amount having been so received.

Moreover, all amounts payable in respect of the notes will be made subject to compliance with Sections 1471 through 1474 of the Code, or any regulations or other official guidance promulgated thereunder, official interpretations thereof, or any applicable agreement entered into in connection therewith (including any agreement, law, regulation, or other official guidance implementing such agreement) (commonly referred to as the **"Foreign Account Tax Compliance Act"** or **"FATCA"**) and any applicable agreement described in Section 1471(b) of the Code. We will have no obligation to pay additional amounts or otherwise indemnify you or the beneficial owner in connection with any such compliance with FATCA and any applicable agreement described in Section 1471(b) of the Code.

Notices

Notices to holders of the notes will be given by mailing such notices to each holder by first class mail, postage prepaid, at the respective address of each holder as that address appears upon our books. Notices to be

given to holders of a global note will be given only to the Depositary, as the registered holder, in accordance with its applicable policies as in effect from time to time. We expect that any such notices will be passed on by the Depositary to the beneficial owners of interests in the notes in accordance with the standard rules and procedures of the Depositary and its direct and indirect participants, including Clearstream, Luxembourg and the Euroclear operator. Notices to be given in respect of notes held in street name will be given only to the bank, broker or other financial institution in whose name the notes are registered, and not the owner of any beneficial interests. Notices to be given to holders of certificated (*i.e.*, definitive) notes will be sent by mail to the respective addresses of the holders as they appear in the note register, and will be deemed given when mailed.

See also "Plan of Distribution-Series A Notes Offered on a Global Basis."

UNITED STATES FEDERAL INCOME TAXATION

The following is a discussion of the material U.S. federal income tax consequences of ownership and disposition of the notes. It applies to you only if you hold the notes as capital assets within the meaning of Section 1221 of the Code. It does not address all aspects of U.S. federal income taxation that may be relevant to you in light of your particular circumstances, including any special tax accounting rules set forth in Section 451 of the Code, any alternative minimum tax or "Medicare contribution tax" consequences, and different consequences that may apply if you are an investor subject to special rules, such as a financial institution, a regulated investment company, a tax-exempt entity (including an "individual retirement account" or a "Roth IRA"), a dealer in securities, a trader in securities that elects to apply a mark-to-market method of tax accounting, a person holding a note as a part of a "straddle" or integrated transaction, a nonresident alien individual present in the United States for more than 182 days in a taxable year, a U.S. holder (as defined below) whose functional currency is not the U.S. dollar, or an entity classified as a partnership for U.S. federal income tax purposes and the partners therein.

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. If you are a partnership holding the notes or a partner in such a partnership, you should consult your tax adviser as to your particular U.S. federal tax consequences of holding and disposing of the notes.

This discussion is based on the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, all as of the date of this prospectus supplement, changes to any of which subsequent to the date hereof may affect the tax consequences described below, possibly with retroactive effect. It does not address the application of any state, local or non-U.S. tax laws. You should consult your tax adviser concerning the application of U.S. federal income tax laws to your particular situation, as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdictions.

This discussion does not apply to notes that are not fully principal-protected or to renewable notes, extendible notes, mandatorily exchangeable notes, or reverse exchangeable notes or notes the interest on or principal of which is payable in, or determined by reference to, one or more currencies other than the U.S. dollar. The tax treatment of these notes will be discussed in the relevant pricing supplement.

If a particular series of notes includes an "Office Substitution" right, as described in the Indenture, the relevant pricing supplement may include disclosure about the possible tax consequences of such a substitution.

If we issue notes through our New York branch, then interest income from those notes will be U.S.-source income for U.S. federal income tax purposes. If we issue notes through another branch, or through our head office in Frankfurt, then (unless we determine otherwise, in which case we will alert you to this determination in the applicable pricing supplement) interest income from these notes will be foreign-source income. Subject to the discussion under "Tax Consequences If Interest Income from a Note Is Foreign-Source Income," the rest of this discussion assumes the interest income from your notes is U.S.-source income.

The following discussion may be modified or superseded by additional information regarding U.S. federal income taxation set forth in an applicable pricing supplement, which you should consult before making a decision to invest in the instruments to which the pricing supplement pertains.

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 and are: (i) a citizen or resident of the United States; (ii) a corporation created or organized in or under the laws of the United States, any State therein or the District of Columbia; or (iii) an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

Payments of Interest

Subject to a number of special rules governing recognition of interest income described below, interest paid on a note, but excluding any pre-issuance accrued interest, generally will be taxable to you as ordinary interest income at the time it accrues or is received, in accordance with your method of accounting for U.S. federal income tax purposes.

Taxable Disposition of a Note

Upon the taxable disposition of a note (including early redemption or settlement at maturity), you will recognize taxable gain or loss equal to the difference between the amount realized and your basis in the note. Your basis in a note should generally equal the amount you paid to acquire it, subject to a number of special rules described below. For this purpose, the amount realized generally does not include any amount attributable to accrued interest, which generally will be treated as a payment of interest. In general, gain or loss realized upon the taxable disposition 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. Exceptions to these general rules are described below under "—Short-term Notes," "—Market Discount" and "—CPDI Notes." The deductibility of capital losses is subject to limitations.

OID Notes

For purposes of this discussion, an OID Note is one that has an "issue price" that is less than its "stated redemption price at maturity" unless the note satisfies a *de minimis* threshold (described below). This discussion does not apply to notes described below under "—Short-term Notes." The "issue price" of a note will be the first price at which a substantial amount of notes in the relevant issue is sold to the public (not including sales to bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The "stated redemption price at maturity" of a note generally will equal the sum of all payments required under the note other than payments of "qualified stated interest." "Qualified stated interest" generally includes stated interest unconditionally payable at least annually at a single fixed rate, and also includes stated interest on certain floating-rate notes.

If the difference between a note's stated redemption price at maturity and its issue price is less than a *de minimis* amount—generally 0.25% of the note's stated redemption price at maturity multiplied by the number of complete years from issuance to maturity—the note will not be treated as issued with original issue discount ("**OID**") and therefore will not be subject to the rules described below. If your note is issued with *de minimis* OID, you generally will include this OID in income, as capital gain, upon its taxable disposition.

If you are the beneficial owner of an OID Note, you will be required to include any qualified stated interest payments in income at the time they accrue or are received, in accordance with your method of accounting for U.S. federal income tax purposes. In addition, you will be required to include OID in income as it accrues, in accordance with a constant-yield method based on the compounding of interest, regardless of your method of tax accounting. Under this method, you generally will be required to include in income increasingly greater amounts of OID in successive accrual periods. Your basis in an OID Note will be increased by the amount of OID included in your income and reduced by any payments other than payments of qualified stated interest on such note.

You may make an election to include in gross income all interest that accrues on a note (including stated interest, OID, *de minimis* OID, market discount and *de minimis* market discount, as adjusted by any amortizable bond premium or acquisition premium) in accordance with a constant-yield method based on the compounding of interest (a "**constant-yield election**"). This election may be revoked only with the permission of the Internal Revenue Service ("**IRS**"). Some of the consequences of such an election are discussed below.

Short-term Notes

For the purposes of this discussion, a Short-term Note is one with a term of one year or less (from but excluding the settlement date to and including the last possible date that the note could be outstanding pursuant to its terms). Generally, a Short-term Note is treated as issued at a discount equal to the difference between the aggregate amount of all payments required to be made on the note and the note's issue price. As discussed below, certain aspects of the U.S. federal income tax treatment of a Short-term Note with contingent payments are uncertain.

If you are a cash-method taxpayer, you generally will not be required to recognize income with respect to a Short-term Note, other than with respect to receipt of interest payments, prior to its taxable disposition. If you are an accrual-method taxpayer (or a cash-method taxpayer who elects to accrue income on the note currently), you

will be subject to rules that generally require accrual of discount on short-term debt instruments on a straight-line basis, unless you elect a constant-yield method of accrual based on daily compounding. In the case of a Short-term Note with contingent payments, it may not be clear how accruals should be determined.

Upon the taxable disposition of a Short-term Note, you will recognize gain or loss in an amount equal to any difference between the amount you receive and your adjusted basis in the note. Your adjusted basis in the note will generally equal the amount you paid to acquire it, increased by any previously accrued but unpaid discount you have included in income. The amount of any resulting loss will be treated as a short-term capital loss, the deductibility of which is subject to limitations. The excess of the amount you receive at maturity over your basis in the note generally should be treated as ordinary income.

If you are a cash-method taxpayer who has not elected to accrue income on a Short-term Note currently, you generally will be required to defer deductions for any interest on indebtedness you incur to purchase or carry the note, in an amount not exceeding the accrued discount that you have not included in income. In addition, if you are such a taxpayer who realizes gain on a sale of a Short-term Note prior to its maturity, all or a portion of your gain will be treated as ordinary income, in an amount not exceeding the amount of accrued discount that you have not included in income. The application of the rules discussed in this paragraph to a Short-term Note with contingent payments may be unclear.

Market Discount

If you purchase a note (other than a Short-term Note or a CPDI Note) for an amount that is less than its stated redemption price at maturity or, in the case of an OID Note, its "adjusted issue price," the amount of the difference generally will be treated as market discount for federal income tax purposes, unless this difference is less than a specified *de minimis* amount. An OID Note's "adjusted issue price" is its issue price increased by the amount of previously includible OID and decreased by prior payments on the OID Note that did not constitute qualified stated interest.

You will be required to treat any principal payment on (or, in the case of an OID Note, any payment that does not constitute qualified stated interest), or any gain on the taxable disposition of, a note as ordinary income to the extent of any accrued market discount, unless this market discount has been previously included in your income pursuant to an election to include market discount in income as it accrues, or pursuant to a constant-yield election as described under "—OID Notes" above. If a note is disposed of in one of certain nontaxable transactions, accrued market discount will be includible as ordinary income as if you had sold the note in a taxable transaction at its then fair market value. Unless you elect to include market discount in income as it accrues, you generally will be required to defer deductions for any interest on indebtedness you incur to purchase or carry the notes in an amount not exceeding the accrued market discount that you have not included in income.

If you make an election to include market discount in income as it accrues (a "market discount accrual election"), that election will apply to all market discount bonds acquired on or after the first day of the first taxable year to which that election applies. If you make a constant-yield election (as described under "—OID Notes" above) with respect to a market discount note, that election will result in a deemed market discount accrual election for the taxable year in which the note was acquired.

Acquisition Premium and Amortizable Bond Premium

If you purchase an OID Note for an amount that is greater than the note's adjusted issue price but less than or equal to the sum of all amounts payable on the note after the purchase date, other than payments of qualified stated interest, you will be considered to have purchased the note with acquisition premium. Under the acquisition premium rules, the amount of OID that you must include in your gross income with respect to the note for any taxable year will be reduced by the portion of acquisition premium properly allocable to that year.

If you purchase a note for an amount that exceeds the sum of all amounts payable on the note after the purchase date, other than payments of qualified stated interest, you generally will be considered to have purchased the note with amortizable bond premium equal to this excess. If the note is not optionally redeemable prior to its maturity date, you generally may elect to amortize this premium over the remaining term of the note using a constant-yield method. If the note may be optionally redeemed after you acquire it, the amount of amortizable bond premium is determined by substituting the optional redemption date for the maturity date and the optional redemption price for the amount payable at maturity if (and only if) the substitution results in a smaller amount of premium attributable to the period before the optional redemption date. Under this rule, the amount of amortizable bond premium may be reduced, which may adversely affect you. 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. In addition, you will not be required to include any OID in your income with respect to your notes. If you elect to amortize bond premium, you must reduce your basis in the note by the amount of the premium amortized in any year. An election to amortize bond premium applies to all taxable debt obligations then owned and thereafter acquired and may be revoked only with the consent of the IRS.

If you make a constant-yield election (as described under "-OID Notes" above) for a note with amortizable bond premium, the election will result in a deemed election to amortize bond premium for all of your debt instruments with amortizable bond premium.

VRDI Notes

For purposes of this discussion, a "**VRDI Note**" is one properly treated as a variable rate debt instrument for U.S. federal income tax purposes. Qualified stated interest on a VRDI 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. In general, it is expected that all stated interest on a VRDI Note that provides for a single floating rate will be qualified stated interest, although the relevant pricing supplement may indicate that this is not the case.

In certain cases, typically involving a VRDI Note that provides for a fixed rate of interest for a term longer than one year followed by a floating rate, a portion of the stated interest on the note may not be qualified stated interest. If this is the case, we will determine the portion of stated interest that should not be treated as qualified stated interest but instead should be treated as part of the "stated redemption price at maturity," and the amount of OID on the note. The relevant pricing supplement will either include that information or will specify the manner in which you may obtain it from us.

CPDI Notes

For purposes of this discussion, a "**CPDI Note**" is one properly treated as a contingent payment debt instrument for U.S. federal income tax purposes. A CPDI Note will be subject to special OID provisions set out in the Treasury regulations, under which you will be required to accrue the OID on the note as interest income, as described below.

We are required to determine a "comparable yield" for each issuance of CPDI Notes. The comparable yield generally is the yield at which, in similar market conditions, we could issue a fixed-rate debt instrument with terms similar to those of the relevant CPDI Notes, including the level of subordination, term and timing of payments, but excluding any adjustments for the riskiness of the contingencies or the liquidity of those CPDI Notes. Solely for purposes of determining the amount of OID that you will be required to accrue as interest income, we are also required to construct a "projected payment schedule" representing a payment or series of payments the amount(s) and timing of which would produce a yield to maturity equal to the comparable yield.

We will determine the comparable yield for each issuance of CPDI Notes and will provide the comparable yield, and the related projected payment schedule, in the relevant pricing supplement for the notes or in another manner described in the relevant pricing supplement. Neither the comparable yield nor the projected payment schedule constitutes a representation by us regarding the actual contingent amount(s) that we will pay on a CPDI Note.

For U.S. federal income tax purposes, you are required to use our determination of the comparable yield and projected payment schedule in determining interest accruals and adjustments thereto 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 a CPDI Note in each taxable year based on the comparable yield, with adjustments to reflect the difference, if any, between the actual and projected amount(s) of payment(s) (including contingent payment(s) and stated interest payment(s), if any) on the CPDI Note during the year (as described below). Subject to any adjustment(s) reflecting the difference between the actual and the projected amount(s) of payments on the CPDI Note, no additional income will be recognized upon the receipt of actual payments in amounts equal to the interest accrued based upon the comparable yield described above.

In addition to accruing interest 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 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. Any net negative adjustment in excess of the amounts described above will be carried forward to offset future interest income in respect of the note or to reduce the amount realized on a taxable disposition of the note.

Upon a taxable disposition of a CPDI Note prior to its maturity, you generally will recognize taxable income or loss equal to the difference between the amount received from the disposition and your adjusted basis in the CPDI Note. Your adjusted basis in the CPDI Note generally will equal the amount you paid to acquire it, increased by the amount of interest income previously accrued by you 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 prior projected payments in respect of the CPDI Note. You generally must treat any income on a taxable disposition 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 you have previously taken into account as ordinary losses), with the balance treated 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.

If you purchase a CPDI Note for an amount that differs from its "adjusted issue price" (as defined above), you will be required to account for this difference, generally by allocating it reasonably among projected payments on the notes or daily portions of interest that you are required to accrue with respect to the notes and treating these allocations as adjustments to your income when the payment is made or the interest accrues. You should consult your tax adviser with respect to the tax consequences of an investment in CPDI Notes, including the treatment of the difference, if any, between your basis in your notes and their adjusted issue price.

At maturity, you generally will be treated as receiving the amount of the payment set forth in the projected payment schedule, reduced by any net negative adjustment carryforward. If you receive a different amount, the difference generally will be taken into account as a positive or negative adjustment, with consequences described above.

Special rules may apply if all the remaining payments on a CPDI Note become fixed substantially contemporaneously. For this purpose, payments will be treated as fixed if the remaining contingencies with respect to them are remote or incidental. Under these rules, you would be required to account for the differences between the originally projected payments and the fixed payments in a reasonable manner over the periods to which the differences relate. In addition, you would be required to make adjustments to, among other things, your accrual periods and your basis in the note. The character of any gain or loss on a taxable disposition of your note also could be affected.

Specified Foreign Financial Assets

Individual U.S. holders that own "specified foreign financial assets" with an aggregate value in excess of \$50,000 on the last day of the taxable year or \$75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which may include Notes issued in certificated form) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. holders who fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in the Notes, including the application of the rules to their particular circumstances.

Tax Consequences to Non-U.S. Holders

You generally are a "non-U.S. holder" if, for U.S. federal income tax purposes, you are a beneficial owner of a note and are: (i) a nonresident alien individual; (ii) an entity treated as a foreign corporation; or (iii) a foreign estate or trust.

You are not a "non-U.S. holder," as used herein, if you are a beneficial owner of a note who is (i) an individual present in the United States for 183 days or more in the taxable year of disposition of the note or (ii) a former citizen or resident of the United States, if certain conditions apply. If you are a potential investor to whom such considerations might be relevant, you are urged to consult your tax adviser regarding the U.S. federal income tax consequences of the disposition of a note (including early redemption or settlement at maturity).

Subject to the discussion below under "—Additional Withholding Tax Considerations" and "—'FATCA' Legislation," payments to you on a note, and any gain from a taxable disposition of a note, generally will be exempt from U.S. federal withholding and income tax if (i) you provide a properly completed IRS Form W-8 appropriate to your circumstances and (ii) these amounts are not effectively connected with your conduct of a trade or business in the United States.

If you are engaged in a trade or business in the United States, and income or gain from a note is effectively connected with your conduct of that trade or business (and, if an applicable treaty so requires, is attributable to a permanent establishment in the United States), you generally will be taxed in the same manner as a U.S. holder. If this paragraph applies to you, you should consult your tax adviser with respect to other U.S. tax consequences of the ownership and disposition of the note, including the possible imposition of a 30% branch profits tax if you are a corporation.

Additional Withholding Tax Considerations

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

We will disclose further information regarding the application of Section 871(m) in the relevant terms supplement. Our determination as to whether Section 871(m) applies to a series of notes is not binding on the IRS. The Section 871(m) regulations require complex calculations to be made with respect to derivatives linked to U.S. stocks, and their application to a specific series of notes may be uncertain. Accordingly, even if we determine that Section 871(m) does not apply to a series of notes, the IRS could challenge our determination and assert that withholding is required in respect of those notes. Additionally, the application of Section 871(m) may be affected by your particular circumstances (for example, where you enter into two or more transactions that refer to the same underlying security and the transactions were entered into in connection with each other). You should consult your tax adviser regarding the potential application of Section 871(m) to a series of notes. We will not pay additional amounts on account of any withholding tax imposed by regulations under Section 871(m).

"FATCA" Legislation

Legislation commonly referred to as "FATCA" and regulations promulgated thereunder generally impose a withholding tax of 30% on payments to certain non-U.S. entities (including financial intermediaries) with respect to certain financial instruments, 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. Withholding under these rules (if applicable) applies to (i) payments of interest (including OID) on the notes and "dividend equivalents" (described above) and (ii) payments of gross proceeds of the sale, exchange, retirement or other disposition of notes that can produce U.S.-source interest or dividends for U.S. federal income tax purposes. However, under proposed Treasury regulations (the preamble to which specifies that taxpayers are permitted to rely on them pending finalization), FATCA withholding will not apply to

gross proceeds from the sale or other disposition of the notes. You may be required to provide to a financial institution in the chain of payments on the notes information and tax documentation regarding your identity, and if you are an entity, the identity of your direct and indirect owners, and this information may be reported to relevant tax authorities, including the IRS. You should consult your tax adviser regarding the potential application of FATCA, including the availability of certain refunds or credits. We will not pay additional amounts on account of any withholding tax imposed by FATCA.

Information Reporting and Backup Withholding

You may be subject to information reporting. You may also be subject to backup withholding on payments in respect of your notes at the rate specified in the Code unless you provide certain identifying information (such as a correct taxpayer identification number, if you are a U.S. holder) and otherwise satisfy the requirements of the backup withholding rules. If you are a non-U.S. holder and you provide a properly completed Form W-8 appropriate to your circumstances, you will generally establish an exemption from backup withholding. 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.

Tax Consequences If Interest Income from a Note Is Foreign-Source Income

If interest income from a note is foreign-source income for U.S. federal income tax purposes, the U.S. federal income tax consequences of owning and disposing of the notes that apply to U.S. Holders will generally be the same as described above, except that the discussion above under "—'FATCA' Legislation" will not apply to the notes. In addition, the amount of foreign tax credits available to you for U.S. federal income tax purposes may be increased. The rules governing foreign tax credits are complex, and you should consult your tax adviser regarding the availability of foreign tax credits in your particular circumstances.

There generally will be no U.S. federal income tax consequences to non-U.S. holders of owning and disposing of notes the interest income with regard to which is foreign-source income for U.S. federal income tax purposes. Non-U.S. holders of these notes are generally exempt from backup withholding but may have to comply with certification procedures to establish an entitlement to this exemption. If you are a non-U.S. holder, you should consult your tax adviser about these rules and any other reporting obligations that may apply to your ownership or disposition of the notes.

The U.S. federal income tax discussion set forth above does not address all aspects of U.S. federal income taxation that may be relevant to you in light of your particular circumstances. You should consult your tax adviser regarding the application of U.S. federal tax laws in your particular circumstances, as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

TAXATION BY GERMANY OF NON-RESIDENT HOLDERS

The following is a general discussion of certain German income tax consequences of the acquisition, ownership and disposition of the notes to an original purchaser of the notes that is not a resident of Germany for tax purposes. This summary is based on the laws currently in force and as applied in practice on the date of this document, which are subject to change, possibly with retroactive effect. This discussion does not purport to be a complete, exhaustive or final summary of the tax law and practice currently applicable in the Federal Republic of Germany. Investors or other interested parties should obtain individual tax advice in connection with the acquisition and holding, as well as the sale, of notes.

Income from Notes. Interest income received on the notes and capital gains realized from the sale or other disposition of the notes by individuals who are not tax residents of the Federal Republic of Germany (*i.e.*, persons who have neither their residence nor their customary place of abode in the Federal Republic of Germany) or by corporations that do not maintain their statutory seat or principal place of management in the Federal Republic of Germany are generally not subject to taxation in the Federal Republic of Germany, unless (i) the notes form part of the business property of a permanent establishment, including a permanent representative, or a fixed base maintained in Germany by the holder of the notes or (ii) the income under the notes otherwise constitutes German-source income (*e.g.*, in the case of certain exchangeable or profit participating notes).

German Withholding Tax. If interest on a note or capital gain from the sale or other disposition of a note that is kept or administered in a German securities deposit account by a German bank or a German financial services institution (which term includes a German branch of a foreign bank or a foreign financial services institution but excludes a foreign branch of a German bank or a German financial services institution), a German securities trading enterprise or a German securities trading bank is received by a person who is not a tax resident of the Federal Republic of Germany but who (i) is taxable in the Federal Republic of Germany with respect to certain German source income, and if, according to German tax law, such interest or gain falls into a category of taxable income from German sources that is subject to a limited income tax liability (*e.g.*, income effectively connected with a German trade or business) or (ii) does not provide evidence of the fact that he is not subject to taxation in Germany, such interest or gain is subject to a withholding tax of 25% (plus a 5.5% solidarity surcharge (*Solidaritătszuschlag*) thereon, so that the effective rate of withholding is 26.375%). However, if the notes are business assets of a German business establishment and the holder files a corresponding declaration with the financial institution acting as a paying agent, capital gain from the sale or other disposition of such notes will not be subject to the withholding tax. Withholding tax on interest on notes held as business assets may be credited as prepayment against the German corporate or personal income tax and solidarity surcharge liability.

Other Taxes. No estate, inheritance or gift taxes with respect to any note will arise under the laws of the Federal Republic of Germany if, in the case of estate and inheritance taxes, both the decedent and the beneficiary, and, in the case of gift taxes, both the donor and the donee, are non-residents of the Federal Republic of Germany and such note is not attributable to a permanent establishment in the Federal Republic of Germany. A non-resident is considered a German resident for German gift and inheritance taxation purposes if he is a German citizen and has not spent more than five consecutive years outside Germany without maintaining a residence in Germany. No stamp, issue, registration or similar taxes or duties will be payable in the Federal Republic of Germany in connection with the issuance, delivery or execution of the notes. The European Commission has published a proposal for a Directive for a common financial transaction tax. Such proposal remains the subject of negotiations between participating member states of the European Union, including Germany, and may, if implemented, apply to certain dealings in the notes. Investors are advised to seek their own professional advice in relation to the financial transaction tax.

U.S.-Germany Intergovernmental Agreement. Germany signed an intergovernmental agreement with the United States (the "**U.S.**–**Germany IGA**") regarding the implementation of FATCA, under which certain disclosure requirements will be imposed in respect of certain investors in the notes who are, or are entities that are controlled by one or more individuals who are, residents or citizens of the United States, unless an exemption applies. Certain due diligence obligations will also be imposed. Where applicable, information that will need to be disclosed will include certain information about investors in the notes, the ultimate beneficial owners and/or controllers, and their investment in and return from the notes. Under the terms of the U.S.–Germany IGA, German resident financial institutions that comply with the due diligence and reporting requirements of Germany's domestic legislation will be treated as compliant with FATCA and, as a result, should not be subject to FATCA withholding on payments they receive and should not be required to withhold under FATCA on payments they make.

Common Reporting Standard. The Organisation for Economic Co-Operation and Development released the Common Reporting Standard ("**CRS**") designed to create a global standard for the automatic exchange of financial account information, similar to the information to be reported under FATCA. On October 29, 2014, 51 jurisdictions signed the Multilateral Competent Authority Agreement (the "**Multilateral Agreement**") that activates this automatic exchange of FATCA-like information in line with the CRS. Since then, further jurisdictions have signed the Multilateral Agreement and in total over 100 jurisdictions have committed to adopting the CRS. Further, new mandatory automatic exchange of financial account information are implemented under Council Directive 2011/16/EU on Administrative Cooperation in the Field of Taxation (as amended) (the "**DAC**"). Under the CRS and legislation enacted in Germany to implement the CRS and DAC, certain disclosure requirements will be imposed in respect of certain investors in the notes who are, or are entities that are controlled by one or more individuals who are, residents of any of the jurisdictions that have adopted the CRS, unless a relevant exemption applies. Where applicable, information that would need to be disclosed will include certain information about investors in the notes, the ultimate beneficial owners and/or controllers, and their investment in and returns from the notes.

All prospective investors should consult with their own tax advisors regarding the possible implication of FATCA, CRS, DAC and other similar legislation and/or regulations on their investment in the notes.

BENEFIT PLAN INVESTOR CONSIDERATIONS

A fiduciary of a pension, profit-sharing or other employee benefit plan subject to 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.

In addition to ERISA's general fiduciary standards, Section 406 of ERISA and Section 4975 of the Code prohibit ERISA Plans, as well as plans, accounts and other arrangements (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" of such Plans with persons who are "parties in interest" under ERISA or "disqualified persons" under Section 4975 of the Code (in either case, "**Parties in Interest**") with respect to such Plans unless exemptive relief is available under a statutory or administrative exemption. Such Parties in Interest could include, without limitation, us, the agents, the calculation agent, the paying agent, issuing agent and registrar, the Depositary or any of our or their respective affiliates. Parties in Interest that engage in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and Section 4975 of the Code. Thus, a Plan fiduciary considering an investment in the notes should also consider whether such investment might constitute or give rise to a prohibited transaction under Section 406 of ERISA or Section 4975 of the Code. For example, the notes might be deemed to represent a direct or indirect sale of property, extension of credit or furnishing of services between a Party in Interest and an investing Plan which would be prohibited unless exemptive relief were available under an applicable exemption.

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 professional asset managers). In addition, Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code may provide a limited exemption for the purchase and sale of the notes and the related lending transactions, provided that neither the Party in Interest nor any of its affiliates has or exercises any discretionary authority or control or renders 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, unless otherwise provided in the applicable pricing supplement, 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 or any person investing "plan assets" of any Plan, unless such purchaser or holder is eligible for exemptive relief, including relief available under PTCE 96-23, 95-60, 91-38, 90-1 or 84-14 or the service provider exemption.

The fiduciary and prohibited transaction considerations summarized above generally do not apply to governmental plans (as defined in Section 3(32) of ERISA), certain 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**"). However, these Non-ERISA Arrangements may be subject to similar provisions under applicable federal, state, local, non-U.S. or other regulations, rules or laws ("**Similar Laws**"). The fiduciaries of Non-ERISA Arrangements should also consider the foregoing issues in general terms as well as any further issues arising under any applicable Similar Laws.

Each purchaser or holder of the notes or any interest therein shall be deemed to have represented and warranted, on each day such purchaser or holder holds such notes, that either (a) it is not a Plan or a Non-ERISA Arrangement and it is not purchasing or holding such notes on behalf of or with "plan assets" of any Plan or Non-ERISA Arrangement or (b) its purchase, holding and disposition of such notes will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA and Section 4975 of the Code or a violation of any Similar Law.

Due to the complexity of the applicable rules, it is particularly important that fiduciaries or other persons considering purchasing the notes on behalf of any Plan or Non-ERISA Arrangement consult with their counsel prior to purchasing the notes.

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:

- the purchaser or holder or its fiduciary has made and shall make all investment decisions for the purchaser or holder and the purchaser or holder has not relied and shall not rely in any way upon us or any of our 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, (C) the holding of the notes, or (D) the exercise of or failure to exercise any rights we or our affiliate or the purchaser or holder has under or with respect to the notes;
- (ii) we and our affiliates have acted and will act solely for our own account in connection with our obligations under the notes;
- (iii) any and all assets and positions relating to hedging transactions by us or any of our affiliates are assets and positions of those entities and are not assets and positions held for the benefit of the purchaser or holder;
- (iv) our interests and the interests of our affiliates are adverse to the interests of the purchaser or holder; and
- (v) neither we nor any of our affiliates is a fiduciary or adviser of the purchaser or holder in connection with any such assets, positions or transactions, and any information that we or any of our 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 disposition of the notes do not violate the fiduciary or prohibited transaction rules of ERISA or Section 4975 of the Code or provisions of any applicable Similar Laws. The sale of any notes to any Plan or Non-ERISA Arrangement is in no respect a representation by us or any of our affiliates or representatives that such an investment meets all relevant legal requirements with respect to investments by Plans or Non-ERISA Arrangements generally or any particular Plan or Non-ERISA Arrangement, or that such an investment is appropriate for Plans or Non-ERISA Arrangements generally or any particular Plan or Non-ERISA Arrangement. In this regard, neither this discussion nor anything provided in this prospectus supplement is or is intended to be investment advice directed at any potential Plan or Non-ERISA Arrangement purchaser or at such purchasers generally. The above discussion may be modified or supplemented with respect to a particular offering of notes, including the addition of further ERISA restrictions on purchase and transfer. Please consult the applicable pricing supplement.

PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

We are offering the Series A notes on a continuing basis through DBSI and DBTCA (to the extent either or both of them is named in the applicable pricing supplement), which we refer to individually as an "agent" and together as the "agents." In addition, we may offer the Series A notes through certain other agents to be named in the applicable pricing supplement. Any offering through DBSI and DBTCA will be conducted separately pursuant to separate distribution agreements. DBSI and DBTCA will not join together in any syndicate or group for the purpose of selling the securities to investors, and will not grant or receive any selling concessions, discounts or other allowances to or from each other with respect to the distribution of the securities. DBTCA is not a member of FINRA and, accordingly, is not subject to FINRA's rules or supervisory authority. DBSI is a FINRA member and is subject to FINRA's rules and supervision.

The agents will act on either a reasonable efforts or firm commitment basis to solicit offers to purchase these notes. Unless otherwise indicated in the applicable pricing supplement, the agents will act on a reasonable efforts basis. We will have the sole right to accept offers to purchase these 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. We will pay an agent, in connection with sales of these securities resulting from a solicitation that such agent made or an offer to purchase that such agent received, a commission set forth in the applicable pricing supplement.

We may also sell these notes to an agent (other than DBTCA) as principal for its own account at discounts to be agreed upon at the time of sale within the range of the commissions as disclosed in the applicable pricing supplement. That agent may resell these 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 we will specify in the applicable pricing 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 applicable pricing supplement, the discount allowed to any dealer will not be in excess of the discount that agent will receive from us. After the initial public offering of notes that an agent is to resell on a fixed public offering price basis, the agent may change the public offering price, concession and discount.

Each of the agents may be deemed to be an "underwriter" within the meaning of the Securities Act of 1933, as amended (the "**Securities Act**"). We and the agents have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act, or to contribute to payments made in respect of those liabilities. We have also agreed to reimburse the agents for specified expenses.

To the extent the total aggregate principal amount of notes offered pursuant to a pricing supplement is not purchased by investors, one or more of our affiliates may agree to purchase for investment the unsold portion. As a result, upon completion of an offering, our affiliates may own up to approximately 10% of the notes offered in that offering.

Unless otherwise provided in the applicable pricing supplement, we do not intend to apply for the listing of these notes on a national securities exchange, but have been advised by DBSI that it may make a market in these notes, as applicable laws and regulations permit. DBSI is not obligated to do so, however, and it may discontinue making a market at any time without notice. No assurance can be given as to the liquidity of any trading market for these notes.

Delivery of the notes will be made against payment therefor on or about the issue date specified in the applicable pricing supplement. Under Rule 15c6-1 of the Exchange Act trades in the secondary market generally are required to settle in two business days after the date the notes are priced, unless the parties to any such trade expressly agree otherwise. Accordingly, if the applicable pricing supplement specifies that the issue date is more than two business days after the date on which the notes are priced, purchasers who wish to trade such notes at any time prior to the second business day preceding the issue date will be required, by virtue of the fact that the notes will not settle in T+2, to specify an alternative settlement cycle at the time of any such trade to prevent a failed settlement; such purchasers should also consult their own advisors in this regard.

Conflicts of Interest. DBSI and DBTCA are wholly owned indirect subsidiaries of the Bank. Because DBSI is both our affiliate and a member of FINRA, any distribution of the notes offered hereby by DBSI must be made in compliance with the applicable provisions of FINRA Rule 5121 regarding a FINRA member firm's distribution of the securities of an affiliate and related conflicts of interest. In accordance with FINRA Rule 5121, DBSI may not make sales in offerings of the notes to any of its discretionary accounts without the prior written approval of the customer.

Following the initial distribution of these notes, each agent may offer and sell those notes in the course of its business as a broker-dealer. An agent (other than DBTCA, which would only act as an agent) may act as principal or agent in those transactions and will make any sales at varying prices related to prevailing market prices at the time of sale or otherwise. The agents may use this prospectus supplement in connection with any of those transactions. No agent is obligated to make a market in any of these notes, and any agent that does make a market may discontinue doing so at any time without notice.

In order to facilitate the offering of these notes, the agents may engage in transactions that stabilize, maintain or otherwise affect the price of these notes or any other securities the prices of which may be used to determine payments on these notes. Specifically, the agents may sell more notes than they are obligated to purchase in connection with the offering, creating a short position for their own accounts. A short sale is covered if the short position is no greater than the number or amount of notes available for purchase by the agents under any overallotment option. The agents can close out a covered short sale by exercising the overallotment option or purchasing these notes in the open market. In determining the source of notes to close out a covered short sale, the agents will consider, among other things, the open market price of these notes compared to the price available under the overallotment option. The agents may also sell these notes or any other notes in excess of the overallotment option, creating a naked short position. The agents must close out any naked short position by purchasing notes in the open market. A naked short position is more likely to be created if the agents are concerned that there may be downward pressure on the price of these notes in the open market after pricing that could adversely affect investors who purchase in the offering. As an additional means of facilitating the offering, the agents may bid for, and purchase, these notes or any other securities in the open market to stabilize the price of these notes or of any other securities. Finally, in any offering of the notes, the underwriting syndicate or lead underwriter may also reclaim selling concessions allowed to an underwriter or a dealer for distributing these notes in the offering, if the syndicate or lead underwriter repurchases previously distributed notes to cover syndicate short positions or to stabilize the price of these notes. Any of these activities may raise or maintain the market price of these notes above independent market levels or prevent or slow a decline in the market price of these notes. The agents are not required to engage in these activities, and may end any of these activities at any time.

Concurrently with the offering of these notes through the agents, we may issue other debt securities under the Indenture referred to in this prospectus supplement.

Notes Offered on a Global Basis

If the applicable pricing supplement indicates that any of our notes will be offered on a global basis, those registered global notes will be offered for sale in those jurisdictions outside of the United States where it is legal to make offers for sale of those securities.

Each agent has represented and agreed, and any other agent through which we may offer the notes will represent and agree, that if any notes are to be offered outside the United States, it will not offer or sell any such notes in any jurisdiction if such offer or sale would not be in compliance with any applicable law or regulation or if any consent, approval or permission is needed for such offer or sale by it or for or on behalf of the Issuer unless such consent, approval or permission has been previously obtained and such agent will obtain any consent, approval or permission required by it for the subscription, offer, sale or delivery of the notes, or the distribution of any offering materials, under the laws and regulations in force in any jurisdiction to which it is subject or in or from which it makes any subscription, offer, sale or delivery.

Purchasers of any notes offered on a global basis may be required to pay stamp taxes and other charges in accordance with the laws and practices of the country of purchase in addition to the issue price set forth on the cover page hereof.

Notice to Prospective Investors in the EEA

This prospectus supplement and the accompanying prospectus have been prepared on the basis that any offer of notes in any Member State of the EEA will be made pursuant to an exemption under Regulation (EU) 2017/1129 (as amended, the "**Prospectus Regulation**") from the requirement to publish a prospectus for offers of notes. This prospectus supplement and the accompanying prospectus are not a prospectus for the purposes of the Prospectus Regulation.

Prohibition of Sales to EEA Retail Investors

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these

purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II or (iii) not a qualified investor as defined in the Prospectus Regulation . The expression an offer includes the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the notes or otherwise making them available to any retail investor in the EEA be unlawful under the PRIIPs Regulation.

Notice to Prospective Investors in the UK

This prospectus supplement and the accompanying prospectus have been prepared on the basis that any offer of notes in the UK will be made pursuant to an exemption under Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "**UK Prospectus Regulation**") from the requirement to publish a prospectus for offers of notes. This prospectus supplement and the accompanying prospectus are not a prospectus for the purposes of the UK Prospectus Regulation.

Prohibition of Sales to UK Retail Investors

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom ("**UK**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("**EUWA**"); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000, as amended ("**FSMA**"), and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA or (iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation. The expression an offer includes the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe for the notes. Consequently no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

MiFID II Product Governance/Professional Investors and ECPs-only Target Market

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the notes has led to the conclusion that: (i) the target market for the notes is eligible counterparties and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of the notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the notes (a "**distributor**") should take into consideration the manufacturers' target market assessment, however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the notes (by either adopting or refining the manufacturers' target market assessment) and determining the appropriate distribution channels.

UK MIFIR product governance/Professional Investors and ECPs-only Target Market

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the notes has led to the conclusion that: (i) the target market for the notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("**COBS**"), and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("**UK MiFIR**"); and (ii) all channels for distribution of the notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the notes (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

LEGAL MATTERS

Certain legal matters with respect to United States and New York law with respect to the validity of certain of the offered securities will be passed upon for the Bank by Cleary Gottlieb Steen & Hamilton LLP. Certain legal matters with respect to German law will be passed upon for the Bank by Group Legal Services of the Bank. Davis Polk & Wardwell LLP will pass upon certain legal matters with respect to United States and New York law with respect to the validity of certain of the offered securities for any underwriters, dealers or selling agents. Cleary Gottlieb Steen & Hamilton LLP and Davis Polk & Wardwell LLP have in the past represented the Bank and its affiliates and continue to represent the Bank and its affiliates on a regular basis and in a variety of matters.

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide. This prospectus supplement does not constitute an offer to sell or the solicitation of an offer to buy any notes other than the notes described herein or in the accompanying pricing supplement or an offer to sell or the solicitation of an offer to buy such notes in any circumstances in which such offer or solicitation is unlawful. Neither the delivery of this prospectus supplement or the accompanying pricing supplement, nor any sale made hereunder and thereunder shall, under any circumstances, create any implication that there has been no change in the affairs of Deutsche Bank AG since the date hereof or that the information contained or incorporated by reference herein or therein is correct as of any time subsequent to the date of such information.

