

Prospectus Supplement to Prospectus Dated December 29, 2021



The Bank of Nova Scotia
US\$50,000,000,000
Senior Medium-Term Notes, Series I
Terms of Sale

The Bank of Nova Scotia (the “Bank”) may from time to time offer and sell notes, which we refer to as the “notes” in this prospectus supplement, with various terms, including the following:

- stated maturity of nine months or longer
- fixed or floating interest rate, zero-coupon or issued with original issue discount; unless otherwise set forth in the relevant pricing supplement, a floating interest rate may be based on:
 - commercial paper rate
 - U.S. prime rate
 - SOFR
 - EURIBOR
 - treasury rate
 - CMT rate
 - CMS rate
 - federal funds rate
- ranked as senior indebtedness of the Bank
- book-entry form only through The Depository Trust Company, Euroclear, Clearstream or any other clearing system or financial institution named in the relevant pricing supplement
- redemption at the option of the Bank or the option of the holder
- interest on notes paid monthly, quarterly, semi-annually or annually
- unless otherwise set forth in the relevant pricing supplement, minimum denominations of \$2,000 and integral multiples of \$1,000 in excess thereof (except that non-U.S. investors may be subject to higher minimums)
- denominated in U.S. dollars, a currency other than U.S. dollars or in a composite currency
- settlement in immediately available funds settlement outside of The Depository Trust Company

The final terms of each note will be included in a pricing supplement together with, in some cases, a relevant product prospectus supplement. We refer to pricing supplements and relevant product prospectus supplements, if any, as “pricing supplements.” We intend to sell the notes through one or more agents in the form of fixed or floating rate notes and have agreed to pay each agent a commission in an amount as may be agreed between the Bank and such agent with respect to any sale by the Bank as a result of a solicitation made by such agent, See “Supplemental Plan of Distribution (Conflicts of Interest)” for additional information about the agents’ commissions. The aggregate initial offering price of the notes is subject to reduction as a result of the sale by the Bank of other debt securities pursuant to another prospectus supplement to the accompanying prospectus.

See “Risk Factors” beginning on page S-2 to read about factors you should consider before investing in any notes.

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

The notes will not constitute deposits insured under the *Canada Deposit Insurance Corporation Act* (the “CDIC Act”) or by the United States Federal Deposit Insurance Corporation or any other Canadian or United States governmental agency or instrumentality.

Notes that are bail-inable notes (as defined in the accompanying prospectus) are subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and to variation or extinguishment in consequence, and subject to the application of the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the bail-inable notes.

The Bank may sell the notes directly or through one or more agents or dealers, including the agent referred to under “Supplemental Plan of Distribution (Conflicts of Interest).” The agents are not required to sell any particular amount of the notes.

The Bank may use this prospectus supplement in the initial sale of any notes. In addition, the Bank, Scotia Capital (USA) Inc., Scotia Capital Inc. or certain other affiliates of the Bank (the “Market-Makers”) may use this prospectus supplement and accompanying prospectus in market-making or other transactions in any note after its initial sale. A Market-Maker may engage in market-making transactions only in those jurisdictions in which it has all necessary governmental and regulatory authorizations for such activity. ***Unless the Bank or its agent informs the purchaser otherwise in the confirmation of sale or pricing supplement, this prospectus supplement and accompanying prospectus are being used in a market-making transaction.***

The date of this prospectus supplement is December 29, 2021.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus and, if applicable, a product prospectus supplement, provide you with a general description of the notes we may offer. Each time we sell notes we will provide a pricing supplement containing specific information about the terms of the notes being offered. Each pricing supplement or product prospectus supplement may include a discussion of any risk factors or other special considerations that apply to those notes. The pricing supplement may also add, update or change the information in this prospectus supplement and any relevant product prospectus supplement. If there is any inconsistency between the information in this prospectus supplement or any relevant product prospectus supplement and any pricing supplement, you should rely on the information in that pricing supplement. In this prospectus supplement when we refer to this prospectus supplement we are also referring to any relevant product prospectus supplement unless the context otherwise requires.

This prospectus supplement is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Financial Promotion Order”), (ii) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This prospectus supplement is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this prospectus supplement relates is available only to relevant persons and will be engaged in only with relevant persons.

RISK FACTORS

An investment in the notes is subject to the risks described below, as well as the risks described under “Risk Factors” in the accompanying prospectus. You should carefully consider whether the notes are suited to your particular circumstances. This prospectus supplement should be read together with the accompanying prospectus, any relevant product prospectus supplement and the relevant pricing supplement. The information in the accompanying prospectus is supplemented by, and to the extent inconsistent therewith replaced and superseded by, the information in this prospectus supplement, any relevant product prospectus supplement and the relevant pricing supplement. This section describes the most significant risks relating to the terms of the notes. For a discussion of the recent COVID-19 pandemic and its impact on our business, see our Annual Report on Form 40-F for the year ended October 31, 2021 under the heading “Management’s Discussion and Analysis—Overview of Performance—Impact of COVID-19”. We urge you to read the following information about these risks, together with the other information in this prospectus supplement, the accompanying prospectus, any relevant product prospectus supplement and the relevant pricing supplement, before investing in the notes.

General Risks Relating to the Notes

The value of the notes will be affected by the general creditworthiness of the Bank.

Any payment to be made on the notes depends on the ability of the Bank to satisfy its obligations as they come due. As a result, the actual and perceived creditworthiness of the Bank may affect the market value of any of the notes issued under our medium term note program and, in the event the Bank was to default on its obligations, holders of such notes may not receive the amounts owed to them under the terms of the notes. Prospective investors should consider the categories of risks identified in the Bank’s most recent Annual Report filed on Form 40-F, as updated by quarterly reports, which is incorporated by reference herein, including credit risk, market risk, liquidity risk, operational risk, reputational risk, environmental risk, strategic risk and insurance risk.

The notes are unsecured and unsubordinated obligations of the Bank and, subject to regulatory requirements, there is no limit on the Bank’s ability to incur additional senior debt.

The notes issuable under our medium term note program will be unsecured and unsubordinated obligations of the Bank and will rank on a parity with all of the Bank’s other senior unsecured debt including deposit liabilities, other than certain governmental claims in accordance with applicable law. Except to the extent regulatory requirements affect the Bank’s decisions to issue more senior debt, there is no limit on the Bank’s ability to incur additional senior debt.

The value of the notes may be affected by changes in credit ratings.

Real or anticipated changes in credit ratings on the Bank’s deposit liabilities may affect the market value of the notes. In addition, real or anticipated changes in credit ratings can affect the cost at which the Bank can transact or obtain funding, and thereby affect the Bank’s liquidity, business, financial condition or results of operations and, therefore, the Bank’s ability to make payments on the notes could be adversely affected.

The value of the notes may be affected by market value and interest rate fluctuations.

The value of the notes may be affected by market value fluctuations resulting from factors which influence the Bank’s operations, including legal and regulatory developments, competition and global market activity. Such changes in law may include changes in statutory, tax and regulatory regimes during the life of the notes. Prevailing interest rates will affect the market value of the notes. Assuming all other factors remain unchanged, the market value of the notes will decline as prevailing interest rates for similar debt instruments rise.

There may be no established trading market for the notes.

Unless otherwise specified in the relevant pricing supplement or any relevant product prospectus supplement, the notes will be new issues of securities and there may be no market through which the notes may be sold and purchasers may therefore be unable to resell such notes. In addition, unless specified in the relevant pricing supplement or any relevant product prospectus supplement, the Bank does not intend to apply for listing or quotation of the notes on any securities exchange or automated quotation system. These factors may affect the pricing of the notes in any secondary market, the transparency and availability of trading prices and the liquidity of the notes.

There can be no assurance that an active trading market will develop for any notes issued under our medium term note program, or if developed, that such a market will be sustained at the offering price of the notes. Even if one or more agents intends to make a market in the notes, they will not be obligated to do so and may stop their market-making at any time. In addition, any market-making activities will be subject to limits of the U.S. Securities Act of 1933, as amended (the “Securities Act”), and the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”).

If any of the notes are traded after their initial issuance, they may trade at a discount from their initial offering price. Future trading prices of the notes will depend on many factors, including prevailing interest rates, the market for similar securities, general economic conditions and our financial condition, performance, prospects and other factors. Accordingly, you may be required to bear the financial risk of an investment in the notes for an indefinite period of time.

The Bank has no limitation on issuing additional indebtedness, which increases the risk that the Bank may be unable to service its debt.

The senior debt securities indenture governing the notes does not contain any financial covenants and contains only limited restrictive covenants. In addition, the senior debt securities indenture will not limit the Bank’s or its subsidiaries’ ability to incur additional indebtedness, issue or repurchase securities, pay dividends or engage in transactions with affiliates. The Bank’s ability to incur additional indebtedness and use its funds for any purpose in the Bank’s discretion may increase the risk that the Bank may be unable to service its debt, including paying its obligations under the notes.

The notes will be governed by New York law.

The notes will be, and the related senior debt securities indenture is, governed by, and construed in accordance with, the laws of the State of New York (other than the provisions relating to bail-in conversion and certain limited provisions that will be governed by the laws of the Province of Ontario and applicable federal laws of Canada; see “Description of the Debt Securities We May Offer—Special Provisions Related to Bail-inable Debt Securities” in the accompanying prospectus). Generally, in an action commenced in a Canadian court for the enforcement of the senior debt securities indenture or the notes, a plaintiff will be required to prove those non-Canadian laws as a matter of fact by the evidence of persons who are experts in those laws.

Fiduciaries of certain plans should consult with counsel.

This paragraph is relevant only if you are a fiduciary of a plan subject to Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended or Section 4975 of the Internal Revenue Code of 1986, as amended (the “Code”) (each such plan, a “Plan”), or a governmental, church or non-U.S. plan subject to similar laws. Fiduciaries of a Plan or a governmental, church or non-U.S. plan subject to similar laws should consult with their counsel regarding their proposed investment in the Notes and the deemed representations they are required to make. See “Certain Considerations for ERISA and Other Employee Benefit Plans” in the accompanying prospectus.

Any notes denominated in U.S. dollars may be subject to exchange rate risks and may have tax consequences for non-U.S. investors.

If you purchase notes denominated in U.S. dollars, with a currency other than U.S. dollars, changes in rates of exchange may have an adverse effect on the value, price or returns of your investment. This prospectus supplement does not address the tax consequences to non-U.S. investors of purchasing U.S. dollar-denominated notes. If you are a non-U.S. investor, you should consult your tax advisors as to the consequences, under the tax laws of the country where you are resident for tax purposes, of acquiring, holding and disposing of the notes and receiving the payments that might be due under the notes.

The notes are not covered by deposit insurance.

The notes will not constitute savings accounts, deposits or other obligations that are insured by the United States Federal Deposit Insurance Corporation, the Deposit Insurance Fund or any other governmental agency or under the CDIC Act, the *Bank Act* (Canada) or any other deposit insurance regime designed to ensure the payment of all or a portion of a deposit upon the insolvency of the deposit taking financial institution. Therefore, you will not be entitled to insurance from the United States Federal Deposit Insurance Corporation or the Canada Deposit Insurance Corporation or other such protection, and as a result, you could lose all or a portion of your investment.

If specified in the relevant pricing supplement or product prospectus supplement, the notes may be subject to optional early redemption at any time, under certain circumstances and subject to certain conditions.

If specified in the relevant pricing supplement or product prospectus supplement, the Bank may, at its option, with the prior written approval of the Superintendent where applicable, redeem the notes in the circumstances and under the conditions described in “Description of the Notes We May Offer—Redemption at the Option of the Bank; No Sinking Fund” or in the relevant pricing supplement or product prospectus supplement.

An optional redemption feature is likely to limit the market value of the notes. During any period when the Bank may elect to redeem the notes, the market value of the notes generally will not rise substantially above the price at which they can be redeemed. This may also be true prior to any redemption period. In addition, in certain circumstances, investors may not receive a make-whole amount or any other compensation in the event of a Redemption.

It is not possible to predict whether the circumstances in which the Bank is able to elect to redeem the notes will occur, and if so, whether or not the Bank will elect to exercise such option to redeem the notes. If the Bank redeems the notes in any of the relevant circumstances, there is a risk that the notes may be redeemed at times when the redemption proceeds are less than the current market value of the notes or when prevailing interest rates may be relatively low, in which latter case investors may only be able to reinvest the redemption proceeds in securities with a lower yield. Potential investors should consider reinvestment risk in light of other investments available at that time.

Risks Relating to Floating Rate Notes

Floating rates of interest are uncertain and could be 0.0%.

If your notes are floating rate notes or otherwise directly linked to a floating rate for some portion of the notes’ term, no interest will accrue on the notes with respect to any interest period for which the applicable floating rate specified in the relevant pricing supplement is zero on the related interest rate reset date. Floating interest rates, by their very nature, fluctuate, and may be as low as 0.0%. Also, in certain economic environments, floating rates of interest may be less than fixed rates of interest for instruments with a similar credit quality and term. As a result, the return you receive on your notes may be less than a fixed rate security issued for a similar term by a comparable issuer.

Notes that bear interest at rates based on EURIBOR may be adversely affected by changes in EURIBOR reporting practices or the method in which EURIBOR is determined or circumstances where EURIBOR is no longer determined or published.

The European Money Markets Institute (formerly Euribor-EBF) has continued in its role as administrator of EURIBOR but has also undertaken a number of reforms in relation to its governance and technical framework since January 2013 pursuant to recommendations by the European Securities and Markets Authority and the European Banking Authority.

It is not possible to predict any changes in the methods pursuant to which the EURIBOR rates are determined, or any other reforms to EURIBOR or any other relevant benchmarks that will be enacted in the European Union (the “EU”) and elsewhere, each of which may adversely affect the trading market for securities based on EURIBOR or any other relevant benchmark, including any notes that bear interest at rates based on EURIBOR and may cause such benchmarks to perform differently than in the past, or cease to exist. In addition, any legal or regulatory changes made by the European Money Markets Institute, the European Commission or any other successor governance or oversight body, or future changes adopted by such body, in the method pursuant to which the EURIBOR or any other relevant benchmarks are determined may result in, among other things, a sudden or prolonged increase or decrease in the reported benchmark, a delay in the publication of any such benchmark rates, trigger changes in the rules or methodologies in certain benchmarks discouraging market participants from continuing to administer or to participate in certain benchmarks, and, in certain situations, could result in a benchmark rate no longer being determined and published. Accordingly, in respect of a note referencing EURIBOR or any other relevant benchmark, such proposals for reform and changes in applicable regulation could have a material adverse effect on the trading market for, the value of and return on such a note (including potential rates of interest thereon).

Risks Relating to SOFR

The Secured Overnight Financing Rate is a relatively new reference rate and its composition and characteristics are not the same as the London Inter-Bank Offered Rate (“LIBOR”).

On June 22, 2017, the Alternative Reference Rates Committee (“ARRC”) convened by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York identified the Secured Overnight Financing Rate (“SOFR”) as the rate that, in the consensus view of the ARRC, represented best practice for use in certain new U.S. dollar derivatives and other financial contracts. SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities, and has been published by the Federal Reserve Bank of New York since April 2018. The Federal Reserve Bank of New York has also begun publishing historical indicative Secured Overnight Financing Rates from 2014. Investors should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR.

The composition and characteristics of SOFR are not the same as those of LIBOR, and SOFR is fundamentally different from LIBOR for two key reasons. First, SOFR is a secured rate, while LIBOR is an unsecured rate. Second, SOFR is an overnight rate, while LIBOR is a forward- looking rate that represents interbank funding over different maturities (*e.g.*, three months). As a result, there can be no assurance that SOFR (including Compounded SOFR, as defined below under “Description of the Notes We May Offer— Interest Rates—SOFR Index Notes”) will perform in the same way as LIBOR would have at any time, including, without limitation, as a result of changes in interest and yield rates in the market, market volatility or global or regional economic, financial, political, regulatory, judicial or other events.

SOFR may be more volatile than other benchmark or market rates.

Since the initial publication of SOFR, daily changes in SOFR have, on occasion, been more volatile than daily changes in other benchmark or market rates, such as USD LIBOR. Although changes in Compounded SOFR generally are not expected to be as volatile as changes in daily levels of SOFR, the return on and value of

SOFR-linked notes may fluctuate more than floating rate securities that are linked to less volatile rates. In addition, the volatility of SOFR has reflected the underlying volatility of the overnight U.S. Treasury repo market. The Federal Reserve Bank of New York has at times conducted operations in the overnight U.S. Treasury repo market in order to help maintain the federal funds rate within a target range. There can be no assurance that the Federal Reserve Bank of New York will continue to conduct such operations in the future, and the duration and extent of any such operations is inherently uncertain. The effect of any such operations, or of the cessation of such operations to the extent they are commenced, is uncertain and could be materially adverse to investors in a note linked to the Compounded SOFR or SOFR Index (as defined herein).

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

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

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

SOFR may be modified or discontinued and notes linked to SOFR may bear interest by reference to a rate other than SOFR, which could adversely affect the value of such notes.

The SOFR Index is published by the Federal Reserve Bank of New York based on data received by it from sources other than us, and we have no control over its methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time. There can be no guarantee, particularly given its relatively recent introduction, that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in notes linked to SOFR. If the manner in which SOFR is calculated is changed or, if applicable, if the manner in which the Compounded SOFR or SOFR Index is calculated is changed, that change may result in a reduction in the amount of interest payable on notes linked to SOFR and the trading prices of such notes. In addition, the Federal Reserve Bank of New York may withdraw, modify or amend the published SOFR Index or SOFR data in its sole discretion and without notice. The interest rate for any interest period will not be adjusted for any modifications or amendments to the SOFR Index or SOFR data that the Federal Reserve Bank of New York may publish after the interest rate for that interest period has been determined.

If the calculation agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date, each as defined in “Description of the Notes We May Offer—Interest Rates—SOFR Index Notes”, have occurred in respect of SOFR, then the interest rate on notes linked to SOFR will no longer be determined by reference to SOFR, but instead will be determined by reference to a different rate, plus a spread adjustment, which we refer to as a “Benchmark Replacement,” as further described under the caption “Description of the Notes We May Offer—Interest Rates—SOFR Index Notes.”

If a particular Benchmark Replacement, as defined in “Description of the Notes We May Offer—Interest Rates—SOFR Index Notes”, or Benchmark Replacement Adjustment, as defined in “Description of the Notes We May Offer—Interest Rates—SOFR Index Notes”, cannot be determined, then the next-available Benchmark Replacement or Benchmark Replacement Adjustment will apply. These replacement rates and adjustments may be selected, recommended or formulated by (i) the Relevant Governmental Body (as defined herein) (such as the ARRC), (ii) the International Swaps and Derivatives Association (“ISDA”) or (iii) in certain circumstances, the calculation agent. In addition, the terms of the notes may expressly authorize the calculation agent to make Benchmark Replacement Conforming Changes, as defined in “Description of the Notes We May Offer—Interest Rates—SOFR Index Notes”, with respect to, among other things, interest periods, the timing and frequency of determining rates and making payments of interest and other administrative matters. The determination of a Benchmark Replacement, the calculation of the interest rate on the notes linked to SOFR by reference to a Benchmark Replacement (including the application of a Benchmark Replacement Adjustment), any implementation of Benchmark Replacement Conforming Changes and any other determinations, decisions or elections that may be made under the terms of such notes in connection with a Benchmark Transition Event, could adversely affect the value of such notes, the return on such notes and the price at which you can sell such notes.

In addition, (i) the composition and characteristics of the Benchmark Replacement will not be the same as those of SOFR, the Benchmark Replacement may not be the economic equivalent of SOFR, there can be no assurance that the Benchmark Replacement will perform in the same way as SOFR would have at any time and there is no guarantee that the Benchmark Replacement will be a comparable substitute for SOFR (each of which means that a Benchmark Transition Event could adversely affect the value of notes linked SOFR, the return on such notes and the price at which you can sell such notes), (ii) any failure of the Benchmark Replacement to gain market acceptance could adversely affect notes linked to SOFR, (iii) the Benchmark Replacement may have a very limited history and the future performance of the Benchmark Replacement may not be predicted based on historical performance, (iv) the secondary trading market for notes linked to the Benchmark Replacement may be limited and (v) the administrator of the Benchmark Replacement may make changes that could change the value of the Benchmark Replacement or discontinue the Benchmark Replacement and has no obligation to consider your interests in doing so.

The interest rate on SOFR-linked notes is based on a Compounded SOFR rate and the SOFR Index, which is relatively new in the marketplace.

For each interest period, the interest rate on floating-rate notes linked to SOFR may be based on Compounded SOFR, which is calculated using the SOFR Index (as defined herein) published by the Federal Reserve Bank of New York according to the specific formula described under “Description of the Notes We May Offer—Interests Rates—SOFR Index Notes”, rather than the SOFR rate published on or in respect of a particular date during such interest period or an arithmetic average of SOFR rates during such period. For this and other reasons, the interest rate on a note linked to the Compounded SOFR or SOFR Index during any interest period will not necessarily be the same as the interest rate on other SOFR-linked investments that use an alternative basis to determine the applicable interest rate. Further, if the interest rate is based on Compounded SOFR and the SOFR rate in respect of a particular date during an interest period is negative, its contribution to the SOFR Index will be less than one, resulting in a reduction to Compounded SOFR used to calculate the interest payable on notes linked to the Compounded SOFR on the interest payment date for such interest period.

Very limited market precedent exists for securities that use SOFR as the interest rate and the method for calculating an interest rate based upon SOFR in those precedents varies. In addition, the Federal Reserve Bank of New York only began publishing the SOFR Index on March 2, 2020. Accordingly, the use of the SOFR Index or the specific formula for the Compounded SOFR used in a note linked to the Compounded SOFR may not be widely adopted by other market participants, if at all. If the market adopts a different calculation method, that would likely adversely affect the market value of notes linked to the Compounded SOFR.

Compounded SOFR with respect to a particular interest period will only be capable of being determined near the end of the relevant interest period.

If the interest rate on your notes is based on Compounded SOFR, the level of Compounded SOFR applicable to a particular interest period, as defined below under “Descriptions of the Notes We May Offer—Interest,” and, therefore, the amount of interest payable with respect to such interest period will be determined on the interest determination date, as defined below under “Descriptions of the Notes We May Offer—Interest Rates—SOFR Index Notes,” for such interest period. Because each such date is near the end of such interest period, you will not know the amount of interest payable with respect to a particular interest period until shortly prior to the related interest payment date and it may be difficult for you to reliably estimate the amount of interest that will be payable on each such interest payment date. In addition, some investors may be unwilling or unable to trade notes linked to the Compounded SOFR or SOFR Index without changes to their information technology systems, both of which could adversely impact the liquidity and trading price of notes linked to the Compounded SOFR or SOFR Index.

The calculation agent will make determinations with respect to SOFR-linked notes.

The calculation agent will make certain determinations with respect to SOFR-linked notes as further described below under “Descriptions of the Notes We May Offer—Interest Rates—SOFR Index Notes.” In addition, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, the calculation agent will make certain determinations with respect to SOFR-linked notes in the calculation agent’s sole discretion as further described below under “Descriptions of the Notes We May Offer—Interest Rates—SOFR Index Notes.” Any determination, decision or election pursuant to the benchmark replacement provisions not made by the calculation agent will be made by us. Any of these determinations may adversely affect the value of SOFR-linked notes, the return on SOFR-linked notes and the price at which you can sell such SOFR-linked notes. Moreover, certain determinations may require the exercise of discretion and the making of subjective judgments, such as with respect to SOFR or the occurrence or non-occurrence of a Benchmark Transition Event and any Benchmark Replacement Conforming Changes. These potentially subjective determinations may adversely affect the value of SOFR-linked notes, the return on SOFR-linked notes and the price at which you can sell such SOFR-linked notes.

Risks Relating to Changes in Canadian Law

No assurance can be given as to the impact of any possible judicial decision or change to the laws of the Province of Ontario and the federal laws of Canada applicable therein or administrative practice after the date of this prospectus supplement and before the date on which the notes are issued. Any such change could materially adversely impact the value of any notes affected by it. Such changes in law may include, but are not limited to, changes to the “bail-in” regime, described in the accompanying prospectus, which may affect the rights of holders of securities issued by the Bank, including the notes.

USE OF PROCEEDS

Except as otherwise set forth in a pricing supplement, the net proceeds from the sale of any notes will be added to our general funds and will be used for general business purposes.

DESCRIPTION OF THE NOTES WE MAY OFFER

You should carefully read the description of the terms and provisions of our debt securities and our senior debt securities indenture under “Description of the Debt Securities We May Offer” in the accompanying prospectus. That section, together with this prospectus supplement, the relevant pricing supplement and any relevant product prospectus supplement, summarizes all the material terms of our senior debt securities indenture, our subordinated debt securities indenture, the NVCC subordinated debt securities indenture and your note, as applicable. They do not, however, describe every aspect of our senior debt securities indenture, our subordinated debt securities indenture, the NVCC subordinated debt securities indenture and your note, as applicable. For example, in this section entitled “Description of the Debt Securities We May Offer”, the accompanying prospectus, the relevant pricing supplement and any relevant product prospectus supplement, we use terms that have been given special meanings in our senior debt securities indenture, our subordinated debt securities indenture and our NVCC subordinated debt securities indenture, as applicable, but we describe the meanings of only the more important of those terms. The specific terms of any series of notes will be described in the relevant pricing supplement. As you read this section, please remember that the specific terms of your note as described in the relevant pricing supplement and any relevant product prospectus supplement will supplement and, if applicable, may modify or replace the general terms described in this section. If a relevant pricing supplement is inconsistent with this prospectus supplement or the product prospectus supplement or the accompanying prospectus, the relevant pricing supplement will control with regard to your note. Thus, the statements we make in this section may not apply to your note.

General

The notes will be issued under our senior debt securities indenture, dated as of January 22, 2010, among the Bank, Computershare Trust Company of Canada, as Canadian trustee and Computershare Trust Company, N.A., as U.S. trustee, as supplemented by a first supplemental indenture, dated as of November 30, 2018 and a second supplemental indenture, dated as of December 27, 2021, and as further amended from time to time, which we may refer to as the “indenture”. The notes constitute a single series of debt securities of the Bank issued under the indenture. The term “debt securities”, as used in this prospectus supplement, refers to all debt securities, including the notes, issued and issuable from time to time under the indenture. The indenture is subject to, and governed by, the Trust Indenture Act of 1939, as amended. The indenture is more fully described below in this section. Whenever we refer to specific provisions or defined terms in the indenture, those provisions or defined terms are incorporated in this prospectus supplement by reference. Section references used in this discussion are references to the indenture. Capitalized terms which are not otherwise defined shall have the meanings given to them in the indenture.

The notes will be limited to an aggregate initial offering price of US\$50,000,000,000 or at our option if so specified in the relevant pricing supplement or any relevant product prospectus supplement, the equivalent of this amount in any other currency or currency unit, and will be our direct, unsecured obligations. This aggregate initial offering price is subject to reduction as a result of the sale by us of other debt securities pursuant to another prospectus supplement to the accompanying prospectus. The notes will not constitute deposits insured under the CDIC Act or by the United States Federal Deposit Insurance Corporation or any other Canadian or United States governmental agency or instrumentality.

We will offer the notes on a continuous basis through one or more agents listed in the section entitled “Supplemental Plan of Distribution (Conflicts of Interest)” in this prospectus supplement. The indenture does not limit the aggregate principal amount of senior notes that we may issue. We may, from time to time, without the consent of the holders of the notes, provide for the issuance of notes or other debt securities under the indenture in addition to the US\$50,000,000,000 aggregate initial offering price of notes noted on the cover of this prospectus supplement. Each note issued under this prospectus supplement will have a stated maturity that will be specified in the relevant pricing supplement and may be subject to redemption or repayment before its stated maturity. As a general matter, each note will mature nine months or more from its date of issue. Notes may be

issued at significant discounts from their principal amount due on the stated maturity (or on any prior date on which the principal or an installment of principal of a note becomes due and payable, whether by the declaration of acceleration, call for redemption at our option, repayment at the option of the holder or otherwise), and some notes may not bear interest. We may from time to time, without the consent of the existing holders of the relevant notes, create and issue further notes having the same terms and conditions as such notes in all respects, except for the issue date, issue price and, if applicable, the first payment of interest thereon.

Currency amounts in this prospectus supplement are expressed in U.S. dollars. Unless we specify otherwise in any note and the relevant pricing supplement or product prospectus supplement, the notes will be denominated in U.S. dollars and payments of principal, premium, if any, and any interest on the notes will be made in U.S. dollars. If any note is to be denominated other than exclusively in U.S. dollars, or if the principal of, premium, if any, or any interest on the note is to be paid in one or more currencies (or currency units or in amounts determined by reference to an index or indices) other than that in which that note is denominated, additional information (including authorized denominations and related exchange rate information) will be provided in any note and the relevant pricing supplement or product prospectus supplement. Unless we specify otherwise in any note and the relevant pricing supplement or product prospectus supplement, notes denominated in U.S. dollars will be issued in minimum denominations of \$2,000 and integral multiples of \$1,000 in excess thereof (except that non-U.S. investors may be subject to higher minimums).

Interest rates or other amounts payable on the notes may differ depending upon, among other factors, the aggregate principal amount of notes purchased in any single transaction. Notes with different variable terms other than interest rates may also be offered concurrently to different investors. We may change interest rates or formulas and other terms of notes from time to time, but no change of terms will affect any note we have previously issued or as to which we have accepted an offer to purchase.

Each note will be issued as a book-entry note in fully registered form without coupons. Each note issued in book-entry form may be represented by a global note that we deposit with and register in the name of a financial institution or its nominee, that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the relevant pricing supplement or product prospectus supplement, The Depository Trust Company, New York, New York, will be the depositary for all notes in global form. Except as discussed in the accompanying prospectus under “Legal Ownership and Book-Entry Issuance”, owners of beneficial interests in book-entry notes will not be entitled to physical delivery of notes in certificated form. We will make payments of principal of, and premium, if any and interest, if any, on the notes through the applicable trustee to the depositary for the notes.

Types of Notes

We may issue the following two types of notes:

- *Fixed Rate Notes.* A note of this type will bear interest at a fixed rate described in the relevant pricing supplement. This type includes zero-coupon notes, which bear no interest and are instead issued at a price lower than the principal amount.
- *Floating Rate Notes.* A note of this type will bear interest at rates that are determined by reference to an 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 your note is a floating rate note, the formula and any adjustments that apply to the interest rate will be specified in the relevant pricing supplement.

Original Issue Discount Notes

A fixed rate note, a floating rate note or a zero-coupon note may be an original issue discount note. A note of this type is issued at a price lower than its principal amount and provides that, upon redemption or acceleration

of its maturity, an amount less than its principal amount will be payable. A note issued at a discount to its principal may, for U.S. federal income tax purposes, be considered an original issue discount note, regardless of the amount payable upon redemption or acceleration of maturity. See “United States Taxation—Original Issue Discount” in the accompanying prospectus for a brief description of the U.S. federal income tax consequences of owning an original issue discount note.

Information in the Pricing Supplement

The relevant pricing supplement will describe one or more of the following terms of your note:

- the stated maturity;
- the specified currency or currencies for principal and interest, if not U.S. dollars;
- the price at which we originally issue your note, expressed as a percentage of the principal amount, and the original issue date;
- whether or not your note is a bail-inable note;
- whether your note is a fixed rate note or a floating rate note;
- if your note is a fixed rate note, the yearly rate at which your note will bear interest, if any, and the interest payment dates;
- if your note is a floating rate note, the interest rate basis, which may be one of the eight interest rate bases described under “— Interest Rates—Floating Rate Notes” below; any applicable index currency or maturity, spread or spread multiplier or initial, maximum or minimum rate; and the interest reset, determination, calculation and payment dates, all of which we describe under “—Interest Rates—Floating Rate Notes” below;
- if your note is an original issue discount note, the yield to maturity;
- if applicable, the circumstances under which your note may be redeemed at our option before the stated maturity, including any redemption commencement date, redemption price(s) and redemption period(s);
- if applicable, the circumstances under which you may demand repayment of your note before the stated maturity, including any repayment commencement date, repayment price(s) and repayment period(s);
- any special Canadian or United States federal income tax consequences of the purchase, ownership or disposition of a particular issuance of notes;
- the use of proceeds, if materially different than those discussed in this prospectus supplement; and
- any other terms of your note, which could be different from those described in this prospectus supplement.

Market-Making Transactions

If you purchase your note in a market-making transaction, you will receive information about the price you pay and your trade and settlement dates in a separate confirmation of sale. A market-making transaction is one in which an agent or other person resells a note that it has previously acquired from another holder. A market-making transaction in a particular note occurs after the original sale of the note.

If you purchase notes issued before September 23, 2018 in a market-making transaction, those notes will not be bail-inable notes, even though the relevant pricing supplement may not specify that your note is not a bail-inable note.

Redemption at the Option of the Bank; No Sinking Fund

If an initial redemption date is specified in the relevant pricing supplement, we may redeem the particular notes prior to their stated maturity date at our option on any date on or after that initial redemption date in whole or from time to time in part in increments of \$1,000 or any other integral multiple of an authorized denomination specified in the relevant pricing supplement (provided that any remaining principal amount thereof shall be at least \$2,000 or other minimum authorized denomination applicable thereto), at the redemption price or prices specified in that pricing supplement, together with unpaid interest accrued thereon to the date of redemption. Unless otherwise specified in the relevant pricing supplement, we must give written notice to registered holders of the particular notes to be redeemed at our option not more than 60 nor less than 10 calendar days prior to the date of redemption.

The notes will not be subject to, or entitled to the benefit of, any sinking fund.

Fixed Rate Notes

Unless otherwise specified in the relevant pricing supplement or product prospectus supplement, the Bank (or its successor) may redeem fixed rate notes at any time prior to the applicable maturity date, in whole or in part, at its option, at any time and from time to time on at least 10 days', but not more than 60 days', prior notice provided (or otherwise transmitted in accordance with procedures of the Depository Trust Company ("*DTC*")) to each holder of such notes to be redeemed. The redemption price will be calculated by the Bank and will be equal to the greater of (1) 100% of the principal amount of such notes to be redeemed and (2) the sum of the present values of the Remaining Scheduled Payments (as defined below) discounted to the redemption date, on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months), at a rate equal to the sum of the Treasury Rate (as defined below) plus the number of basis points specified in the relevant pricing supplement or product prospectus supplement (the "Make-Whole Amount"). In the case of each of clauses (1) and (2), accrued but unpaid interest will be payable to, but excluding, the redemption date.

"Comparable Treasury Issue" means the United States Treasury security or securities selected by the Investment Bank (as defined below) as having an actual or interpolated maturity comparable to the remaining term of the notes to be redeemed.

"Comparable Treasury Price" means, with respect to any redemption date for the notes, (1) the average of the Reference Treasury Dealer Quotations (as defined below) for such redemption date after excluding the highest and lowest of such Reference Treasury Dealer Quotations, or (2) if the Investment Bank obtains fewer than three such Reference Treasury Dealer Quotations, the average of all such quotations.

"Investment Bank" means, unless otherwise specified in the relevant pricing supplement or product prospectus supplement, Scotia Capital (USA) Inc. or its affiliates or successors, or, if such firm is not willing and able to select the applicable Comparable Treasury Issue, an investment banking institution of national standing appointed by the Bank.

"Reference Treasury Dealer" means the Investment Bank, which is a primary U.S. government securities dealer and its affiliates or successors, as selected by the Bank, and any other primary U.S. government securities dealer as we may specify from time to time, provided, however, that if any of them shall cease to be a primary U.S. government securities dealer, we will substitute therefor another primary U.S. government securities dealer.

"Reference Treasury Dealer Quotations" means, with respect to each Reference Treasury Dealer and any redemption date for the notes, the average, as determined by the Investment Bank, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Investment Bank by such Reference Treasury Dealer at 3:30 p.m., New York City time, on the third business day preceding such redemption date.

“Remaining Scheduled Payments” means, with respect to the notes to be redeemed, the remaining scheduled payments of principal of and interest on such notes that would be due after the related redemption date through maturity of such notes (not including any portion of payments of interest accrued as of the redemption date). If that redemption date is not an interest payment date with respect to such notes, the amount of the next succeeding scheduled interest payment on such notes will be reduced by the amount of interest accrued on such notes to the applicable redemption date.

“Treasury Rate” means, with respect to any redemption date for the notes, the rate per annum equal to the semi-annual equivalent yield to maturity or interpolation (on a day count basis) of the interpolated Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date, as determined by the Bank or the Investment Bank.

On and after the redemption date, interest will cease to accrue on such notes or any portion of such notes called for redemption, unless we default in the payment of the redemption price and accrued interest.

On or before the redemption date, we will deposit with the Bank’s paying agent or the trustee money sufficient to pay the Bank’s redemption price of and accrued interest on such notes to be redeemed on that date.

Any redemption or notice may, at the Bank’s discretion, be subject to one or more conditions precedent and, at the Bank’s discretion, the redemption date may be delayed until such time as any or all such conditions precedent included at the Bank’s discretion shall be satisfied (or waived by the Bank) or the redemption date may not occur and such notice may be rescinded if all such conditions precedent included at the Bank’s discretion shall not have been satisfied (or waived by the Bank).

In the case of any partial redemption, selection of such notes to be redeemed will be made in accordance with applicable procedures of DTC.

Floating Rate Notes

If specified in the relevant pricing supplement or product prospectus supplement, the Bank may redeem the floating rate notes on the date specified in the relevant pricing supplement, at its option, in whole or in part, on at least 10 days’, but not more than 60 days’, prior notice provided (or otherwise transmitted in accordance with procedures of DTC) to each holder of the notes to be redeemed, at a redemption price equal to 100% of the principal amount of the notes to be redeemed plus accrued and unpaid interest to, but excluding, the applicable redemption date.

On and after the redemption date, interest will cease to accrue on the floating rate notes or any portion of the floating rate notes called for redemption, unless the Bank defaults in the payment of the redemption price and accrued interest.

On or before the redemption date, the Bank will deposit with the Bank’s paying agent or the trustee money sufficient to pay the Bank’s redemption price of and accrued interest on the floating rate notes to be redeemed on that date.

Any redemption or notice may, at the Bank’s discretion, be subject to one or more conditions precedent and, at the Bank’s discretion, the redemption date may be delayed until such time as any or all such conditions precedent included at the Bank’s discretion shall be satisfied (or waived by the Bank) or the redemption date may not occur and such notice may be rescinded if all such conditions precedent included at the Bank’s discretion shall not have been satisfied (or waived by the Bank).

In the case of any partial redemption, selection of the floating rate notes to be redeemed will be made in accordance with applicable procedures of DTC.

Tax Redemption

Unless otherwise specified in the relevant pricing supplement or product prospectus supplement, the Bank (or its successor) may redeem the notes, in whole but not in part, at a redemption price equal to the principal amount of such notes together with accrued and unpaid interest on such notes to the date fixed for redemption, upon the giving of a notice as described below, if:

- as a result of, (i) any amendment to, clarification of, or change (including any announced prospective change) in, the laws, or any regulations thereunder, or any application or interpretation thereof, of Canada, or any political subdivision or taxing authority thereof or therein, affecting taxation; (ii) any judicial decision, administrative pronouncement, published or private ruling, regulatory procedure, rule, notice, announcement, assessment or reassessment (including any notice or announcement of intent to adopt or issue such decision, pronouncement, ruling, procedure, rule, notice, announcement, assessment or reassessment) (collectively, an “administrative action”); or (iii) any amendment to, clarification of, or change (including any announced prospective change) in, the official position with respect to or the interpretation of any administrative action or any interpretation or pronouncement that provides for a position with respect to such administrative action that differs from the theretofore generally accepted position, in each case (i), (ii) or (iii), by any legislative body, court, governmental authority or agency, regulatory body or taxing authority, irrespective of the manner in which such amendment, clarification, change, administrative action, interpretation or pronouncement is made known, which amendment, clarification, change or administrative action is effective or which interpretation, pronouncement or administrative action is announced on or after the date of issuance of the notes, there is more than an insubstantial risk (assuming any proposed or announced amendment, clarification, change, interpretation, pronouncement or administrative action is effective and applicable) that the Bank is, or may be, subject to more than a de minimis amount of additional taxes, duties or other governmental charges or civil liabilities because the treatment of any of its items of income, taxable income, expense, taxable capital or taxable paid up capital with respect to the notes (including the treatment by the Bank of interest on the notes) or the treatment of the notes, as or as would be reflected in any tax return or form filed, to be filed, or otherwise could have been filed, will not be respected by a taxing authority;
- as a result of any change (including any announced prospective change) in or amendment to the laws (or any regulations or rulings promulgated thereunder) of Canada (or the jurisdiction of organization of the successor to the Bank) 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 such laws, regulations or rulings (including a holding by a court of competent jurisdiction), which change or amendment is announced or becomes effective on or after the date of the relevant pricing supplement for the notes (or, in the case of a successor to the Bank, after the date of succession), and which in the written opinion to the Bank (or its successor) of legal counsel of recognized standing has resulted or will result (assuming, in the case of any announced prospective change, that such announced change will become effective as of the date specified in such announcement and in the form announced) in the Bank (or its successor) becoming obligated to pay, on the next succeeding date on which interest is due, additional amounts with respect to the notes as described under “—Payment of Additional Amounts;” or
- on or after the date of the relevant pricing supplement for the notes (or, in the case of a successor to the Bank, after the date of succession), any action has been taken by any taxing authority of, or any decision has been rendered by a court of competent jurisdiction in, Canada (or the jurisdiction of organization of the successor to the Bank) or any political subdivision or taxing authority thereof or therein, including any of those actions specified in the paragraph immediately above, whether or not such action was taken or decision was rendered with respect to the Bank (or its successor), or any change, amendment, application or interpretation shall be officially proposed, which, in any such case, in the written opinion to the Bank (or its successor) of legal counsel of recognized standing, will result (assuming that such change, amendment, application, interpretation or action is applied to the

applicable notes by the taxing authority and that, in the case of any announced prospective change, such announced change will become effective as of the date specified in such announcement and in the form announced) in the Bank (or its successor) becoming obligated to pay, on the next succeeding date on which interest is due, additional amounts with respect to the applicable notes as described under “— Payment of Additional Amounts;”;

and, in any such case, the Bank (or its successor), in its business judgment, determines that such obligation cannot be avoided by the use of reasonable measures available to it (or its successor).

In the event the Bank elects to redeem any series of notes pursuant to the provisions set forth in the preceding paragraph, it shall deliver to the trustees a certificate, signed by an authorized officer, stating (i) that the Bank is entitled to redeem such notes pursuant to their terms and (ii) the principal amount of the notes to be redeemed.

Notice of intention to redeem such notes will be given to holders of the notes not more than 45 nor less than 30 days prior to the date fixed for redemption and such notice will specify, among other things, the date fixed for redemption and the redemption price.

Repayment at the Option of the Holder

If one or more optional repayment dates are specified in the relevant pricing supplement, registered holders of the particular notes may require us to repay those notes prior to their stated maturity date on any optional repayment date in whole or from time to time in part in increments of \$1,000 or any other integral multiple of an authorized denomination specified in the relevant pricing supplement (provided that any remaining principal amount thereof shall be at least \$2,000 or other minimum authorized denomination applicable thereto), at the repayment price or prices specified in that pricing supplement, together with unpaid interest accrued thereon to the date of repayment. A registered holder’s exercise of the repayment option will be irrevocable.

For any note to be repaid, the applicable trustee must receive, at its corporate trust office in Canton, Massachusetts, not more than 60 nor less than 10 calendar days prior to the date of repayment, the particular notes to be repaid and, in the case of a book- entry note, repayment instructions from the applicable beneficial owner to the depository and forwarded by the depository. Only the depository may exercise the repayment option in respect of global notes representing book-entry notes. Accordingly, beneficial owners of global notes that desire to have all or any portion of the book-entry notes represented thereby repaid must instruct the participant through which they own their interest to direct the depository to exercise the repayment option on their behalf by forwarding the repayment instructions to the applicable trustee as aforesaid. In order to ensure that these instructions are received by the applicable trustee on a particular day, the applicable beneficial owner must so instruct the participant through which it owns its interest before that participant’s deadline for accepting instructions for that day. Different firms may have different deadlines for accepting instructions from their customers. Accordingly, beneficial owners should consult their participants for the respective deadlines. In addition, at the time repayment instructions are given, each beneficial owner shall cause the participant through which it owns its interest to transfer the beneficial owner’s interest in the global note representing the related book-entry notes, on the depository’s records, to the applicable trustee.

If applicable, we will comply with the requirements of Section 14(e) of the Exchange Act, and the rules promulgated thereunder, and any other securities laws or regulations in connection with any repayment of notes at the option of the registered holders thereof.

We may at any time purchase notes at any price or prices in the open market or otherwise. Notes so purchased by us may, at our discretion, be held, resold or surrendered to the applicable trustee for cancellation.

Interest

Each interest-bearing note will bear interest from its date of issue at the rate per annum, in the case of a fixed rate note, or pursuant to the interest rate formula, in the case of a floating rate note, in each case as specified in the relevant pricing supplement, until the principal thereof is paid. Unless otherwise specified in the relevant pricing supplement or product prospectus supplement, we will make interest payments in respect of fixed rate notes and floating rate notes in an amount equal to the interest accrued from and including the immediately preceding interest payment date in respect of which interest has been paid or from and including the date of issue, if no interest has been paid, to but excluding the applicable interest payment date, the maturity date or the redemption date, as the case may be (each, an “interest period”).

Interest on fixed rate notes and floating rate notes will be payable in arrears on each interest payment date, on the maturity date and on any redemption date (unless otherwise specified in the relevant pricing supplement or product prospectus supplement). The first payment of interest on any note originally issued between a regular record date and the related interest payment date will be made on the interest payment date immediately following the next succeeding record date to the registered holder on the next succeeding record date. Unless we specify otherwise in the relevant pricing supplement or product prospectus supplement, the “regular record date” shall be the fifteenth calendar day, whether or not a “business day”, immediately preceding the related interest payment date. “Business day” is defined below under “—Interest Rates—Special Rate Calculation Terms.” For the purpose of determining the holder at the close of business on a regular record date when business is not being conducted, the close of business will mean 5:00 P.M., New York City time, on that day.

Interest Rates

This subsection describes the different kinds of interest rates that may apply to your note, if it bears interest.

Fixed Rate Notes

The relevant pricing supplement will specify the interest payment dates for a fixed rate note as well as the maturity date. Interest on fixed rate notes will be computed on the basis of a 360-day year consisting of twelve 30-day months or such other day count convention as may be set forth in the pricing supplement. For the purposes of disclosure under the *Interest Act* (Canada), and without affecting the interest payable on any fixed rate note, whenever the interest rate on any fixed rate note is to be calculated on the basis of a period of less than a calendar year, the yearly interest rate equivalent for such interest rate will be the interest rate multiplied by the actual number of days in the relevant calendar year and divided by the number of days used in calculating the specified interest rate.

If any interest payment date, redemption date, repayment date or maturity date of a fixed rate note falls on a day that is not a business day, the Bank will postpone the making of such interest or principal payment to the next succeeding business day (and no interest will be paid in respect of the postponement).

Floating Rate Notes

In this subsection, we use several specialized terms relating to the manner in which floating interest rates are calculated. These terms appear in bold, italicized type the first time they appear, and we define these terms under “—Special Rate Calculation Terms” at the end of this subsection.

The following will apply to floating rate notes:

Interest Rate Basis. We currently expect to issue floating rate notes that bear interest at rates based on one or more of the following interest rate bases:

- commercial paper rate;

- U.S. prime rate;
- SOFR;
- EURIBOR;
- treasury rate;
- CMT rate;
- CMS rate; and/or
- federal funds rate.

We describe each of the interest rate bases in further detail below in this subsection. If you purchase a floating rate note, the relevant pricing supplement or product prospectus supplement will specify the interest rate basis that applies to your note. If your floating rate note has an interest rate basis other than those listed above, the relevant pricing supplement will describe the applicable interest rate basis.

Calculation of Interest. Calculations relating to floating rate notes will be made by the calculation agent, an institution that we appoint as our agent for this purpose. That institution may include any affiliate of ours. The pricing supplement for a particular floating rate note will name the institution that we have appointed to act as the calculation agent for that note as of its original issue date. We may appoint a different institution to serve as calculation agent from time to time after the original issue date of the note without your consent and without notifying you of the change.

For each floating rate note, the calculation agent will determine, on the corresponding interest calculation date or on the interest determination date, as described below, the interest rate that takes effect on each interest reset date or in the case of a note for which the interest basis is SOFR or another backward looking rate, the interest rate for the applicable interest period. In addition, the calculation agent will calculate the amount of interest that has accrued during each interest period—that is, the period commencing on the original issue date or any interest payment date, as the case may be, to, but excluding, the next succeeding interest payment date, and in the case of the last such period, from and including the interest payment date immediately preceding the maturity date or redemption date, to but excluding such maturity date or redemption date. If the interest rate basis is not SOFR or another backward looking rate, for each interest period, the calculation agent will calculate the amount of accrued interest by multiplying the face or other specified amount of the floating rate note by an accrued interest factor for the interest period. This factor will equal the sum of the interest factors calculated for each day during the interest period. The interest factor for each day will be expressed as a decimal and will be calculated by dividing the interest rate, also expressed as a decimal, applicable to that day by 360 or by the actual number of days in the year, as specified in the relevant pricing supplement. For the purposes of disclosure under the *Interest Act (Canada)*, and without affecting the interest payable on any floating rate note, whenever the interest rate on any floating rate note is to be calculated on the basis of a period of less than a calendar year, the yearly interest rate equivalent for that interest rate will be the interest rate multiplied by the actual number of days in the relevant calendar year and divided by the number of days used in calculating the specified interest rate. In no event will the interest on any floating rate note be less than zero. If the interest rate basis is SOFR or another backward looking rate, for each interest period, the calculation agent will calculate the amount of accrued interest on a series of floating rate notes for each interest period by multiplying (i) the outstanding principal amount of such series of floating rate notes by (ii) the product of (a) the interest rate for the relevant interest period multiplied by (b) the quotient of the actual number of calendar days in such interest period or Observation Period (as defined herein), as applicable, divided by 360.

If the interest rate basis is not SOFR or another backward looking rate, upon the request of the holder of any floating rate note, the calculation agent will provide for that note the interest rate then in effect—and, if determined, the interest rate that will become effective on the next interest reset date. If the interest basis is SOFR or another backward looking rate, upon the request of the holder of any floating rate note, the calculation

agent will provide the interest rate most recently calculated for that note, which may not be the interest rate applicable to the current interest period. The calculation agent's determination of any interest rate, and its calculation of the amount of interest for any interest period, will be final and binding in the absence of manifest error.

All percentages resulting from any calculation of the interest rate on the notes during any Reset Rate Period shall be rounded to the nearest one hundred-thousandth of a percentage point with five one millionths of a percentage point rounded upwards (e.g., 9.876545% (or 0.09876545) would be rounded to 9.87655% (or 0.0987655)). All amounts used in or resulting from any calculation relating to a floating rate note will be rounded upward or downward, as appropriate, to the nearest cent, in the case of U.S. dollars, or to the nearest corresponding hundredth of a unit, in the case of a currency other than U.S. dollars, with one-half cent or one-half of a corresponding hundredth of a unit or more being rounded upward.

In determining the interest rate basis that applies to a floating rate note during a particular interest period, the calculation agent may obtain rate quotes from various banks or dealers active in the relevant market, as discussed below. Those reference banks and dealers may include the calculation agent itself and its affiliates, as well as any agent participating in the distribution of the relevant floating rate notes and its affiliates, and they may include our affiliates.

Initial Interest Rate. For any floating rate note, the interest rate in effect from the original issue date to the first interest reset date will be the initial interest rate. We will specify the initial interest rate or the manner in which it is determined in the relevant pricing supplement.

Spread or Spread Multiplier. In some cases, the interest rate basis for a floating rate note may be adjusted:

- by adding or subtracting a specified number of basis points, called the spread, with one basis point being 0.01%; or
- by multiplying the interest rate basis by a specified percentage, called the spread multiplier.

If you purchase a floating rate note, the relevant pricing supplement will indicate whether a spread or spread multiplier will apply to your note and, if so, the amount of the spread or spread multiplier.

Maximum and Minimum Rates. The actual interest rate, after being adjusted by the spread or spread multiplier, may also be subject to either or both of the following limits:

- a maximum rate—*i.e.*, a specified upper limit that the actual interest rate in effect at any time may not exceed; and/or
- a minimum rate—*i.e.*, a specified lower limit that the actual interest rate in effect at any time may not fall below.

If you purchase a floating rate note, the relevant pricing supplement will indicate whether a maximum rate and/or minimum rate will apply to your note and, if so, what those rates are.

Whether or not a maximum rate applies, the interest rate on a floating rate note will in no event be higher than the maximum rate permitted by New York law, as it may be modified by U.S. law of general application and the *Criminal Code* (Canada). Under current New York law, the maximum rate of interest, with some exceptions, for any loan in an amount less than \$250,000 is 16% and for any loan in the amount of \$250,000 or more but less than \$2,500,000 is 25% per year on a simple interest basis. These limits do not apply to loans of \$2,500,000 or more, except for the *Criminal Code* (Canada), which limits the rate to 60%.

The rest of this subsection describes how the interest rate and the interest payment dates will be determined, and how interest will be calculated, on a floating rate note.

Interest Reset Dates. The rate of interest on a floating rate note, other than a SOFR Index note or a floating rate note based on another backward looking rate, will be reset, by the calculation agent described below, daily, weekly, monthly, quarterly, semi-annually or annually. The date on which the interest rate resets and the reset rate becomes effective is called the interest reset date. Except as otherwise specified in the relevant pricing supplement, the interest reset date will be as follows:

- for floating rate notes that reset daily, each business day;
- for floating rate notes that reset weekly and are not treasury rate notes, the Wednesday of each week;
- for treasury rate notes that reset weekly, the Tuesday of each week;
- for floating rate notes that reset monthly, the third Wednesday of each month;
- for floating rate notes that reset quarterly, the third Wednesday of each of four months of each year as indicated in the relevant pricing supplement;
- for floating rate notes that reset semi-annually, the third Wednesday of each of two months of each year as indicated in the relevant pricing supplement; and
- for floating rate notes that reset annually, the third Wednesday of one month of each year as indicated in the relevant pricing supplement.

For a floating rate note other than a SOFR Index note or a floating rate note based on another backward looking rate, the interest rate in effect on any particular day will be the interest rate determined with respect to the latest interest reset date that occurs on or before that day. There are several exceptions, however, to the reset provisions described above. For example, for a SOFR Index note, the interest rate in effect on any particular day will be the interest rate determined with respect to the interest period in which that day occurs.

If any interest reset date for a floating rate note would otherwise be a day that is not a business day, the interest reset date will be postponed to the next day that is a business day (and no interest will be paid in respect of the postponement). For a EURIBOR note, however, if that business day is in the next succeeding calendar month, the interest reset date will be the immediately preceding business day.

Interest Determination Dates. The interest rate that takes effect on an interest reset date (or, in the case of a SOFR Index note or a floating rate note based on another backward looking rate, the interest rate determined for the applicable interest period) will be determined by the calculation agent by reference to a particular date called an interest determination date. Except as otherwise indicated in the relevant pricing supplement:

- for commercial paper rate, federal funds rate and U.S. prime rate notes, the interest determination date relating to a particular interest reset date will be the business day preceding the interest reset date;
- for SOFR Index notes and floating rate notes based on other backward looking rates, the interest determination date relating to a particular interest period will be the date two U.S. Government Securities Business Days before the applicable interest payment date (or, in the case of the final interest period, prior to the maturity date or if we elect to redeem in part or in full any series of notes, the redemption date for such notes);
- for EURIBOR notes, the interest determination date relating to a particular interest reset date will be the second *euro business day* preceding the interest reset date. We refer to an interest determination date for a EURIBOR note as a EURIBOR interest determination date;
- for treasury rate notes, the interest determination date relating to a particular interest reset date, which we refer to as a treasury interest determination date, will be the day of the week in which the interest reset date falls on which treasury bills—*i.e.*, direct obligations of the U.S. government—would normally be auctioned. Treasury bills are usually sold at auction the Monday of each week, unless that

day is a legal holiday, in which case the auction is usually held on the following Tuesday, except that the auction may be held on the preceding Friday. If as the result of a legal holiday an auction is held the preceding Friday, that Friday will be the treasury interest determination date relating to the interest reset date occurring in the next succeeding week; and

- for CMT rate and CMS rate notes, the interest determination date relating to a particular interest reset date will be the second business day preceding the interest reset date.

The interest determination date pertaining to a floating rate note the interest rate of which is determined with reference to two or more interest rate bases (none of which is the SOFR Index) will be the latest business day which is at least two business days before the related interest reset date for the applicable floating rate note on which each interest rate basis is determinable. The interest determination date pertaining to a floating rate note the interest rate of which is determined with reference to two more interest rate bases (one of which is the SOFR Index) will be specified in the relevant pricing supplement.

Interest Calculation Dates. As described above, except for SOFR Index notes, the interest rate that takes effect on a particular interest reset date will be determined by reference to the corresponding interest determination date. Except for SOFR Index notes and EURIBOR notes, however, the determination of the rate will actually be made on a day no later than the corresponding interest calculation date. The interest calculation date will be the earlier of the following, unless otherwise specified in the relevant pricing supplement or product prospectus supplement:

- the tenth calendar day after the interest determination date or, if that tenth calendar day is not a business day, the next succeeding business day; and
- the business day immediately preceding the interest payment date or the maturity, whichever is the day on which the next payment of interest will be due.

The calculation agent need not wait until the relevant interest calculation date to determine the interest rate if the rate information it needs to make the determination is available from the relevant sources sooner.

Interest Payment Dates. The interest payment dates for a floating rate note will depend on when the interest rate is reset and, unless we specify otherwise in the relevant pricing supplement, will be as follows:

- for floating rate notes that reset daily, weekly or monthly, the third Wednesday of each month;
- for floating rate notes that reset quarterly, the third Wednesday of the four months of each year specified in the relevant pricing supplement;
- for floating rate notes that reset semi-annually, the third Wednesday of the two months of each year specified in the relevant pricing supplement; or
- for floating rate notes that reset annually, the third Wednesday of the month specified in the relevant pricing supplement.

Regardless of these rules, if a note is originally issued after the regular record date and before the date that would otherwise be the first interest payment date, the first interest payment date will be the date that would otherwise be the second interest payment date.

In addition, the following special provision will apply to a floating rate note with regard to any interest payment date other than one that falls on the maturity. If the interest payment date would otherwise fall on a day that is not a business day, then the Bank will postpone the making of such interest payment to the next succeeding business day (and no interest will be paid in respect of the postponement). However, if the floating rate note is a SOFR Index note or EURIBOR note and the next business day falls in the next calendar month, then the interest payment date will be the preceding business day. If the maturity date of a floating rate note falls

on a day that is not a business day, we will make the required payment of principal, premium, if any, and interest on the next succeeding business day, and no additional interest will accrue in respect of the payment made on that next succeeding business day.

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

Calculation Agent. Computershare Trust Company, N.A. is currently serving as our calculation agent; however, we may change the calculation agent at any time without notice, and Computershare Trust Company, N.A. may resign as calculation agent at any time upon sixty (60) days’ written notice to us. All determinations made by the calculation agent shall, in the absence of manifest error, be conclusive for all purposes and binding on the Bank and the holders of floating rate notes. So long as a floating interest rate is required to be determined with respect to any series of floating rate notes, there will at all times be a calculation agent. In the event of the resignation or removal of the calculation agent, the Bank shall use its commercially reasonable efforts to appoint a successor calculation agent that is not an affiliate (as such term is defined in the indenture) of the Bank; *provided, however,* that if the Bank is unable to appoint a successor calculation agent that is not an affiliate of the Bank within 60 days of the resignation or removal of the calculation agent, the Bank may appoint itself or an affiliate as successor calculation agent. See “—Calculation of Interest” above for details regarding the role of the calculation agent.

Commercial Paper Rate Notes

If you purchase a commercial paper rate note, your note will bear interest at an interest rate equal to the commercial paper rate and adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement.

The commercial paper rate will be the ***money market yield*** of the rate, for the relevant interest determination date, for commercial paper having the ***index maturity*** indicated in the relevant pricing supplement, as published in ***H.15*** under the heading “Commercial Paper—Nonfinancial.” If the commercial paper rate cannot be determined as described above, the following procedures will apply:

- If the rate described above does not appear in H.15 by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from that source at that time, then the commercial paper rate will be the rate, for the relevant interest determination date, for commercial paper having the index maturity specified in the relevant pricing supplement, as published in any other recognized electronic source used for displaying that rate, under the heading “Commercial Paper— Nonfinancial.”
- If the rate described above does not appear in H.15 or another recognized electronic source by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from one of those sources at that time, the commercial paper rate will be the money market yield of the arithmetic mean of the following offered rates for U.S. dollar commercial paper that has the relevant index maturity and is placed for an industrial issuer whose bond rating is “Aa”, or the equivalent, from a nationally recognized rating agency: the rates offered as of 11:00 A.M., New York City time, on the relevant interest determination date, by three leading U.S. dollar commercial paper dealers in New York City selected by the calculation agent.
- If fewer than three dealers selected by the calculation agent are quoting as described above, the commercial paper rate for the new interest period will be the commercial paper rate in effect for the prior interest period. If the initial interest rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

U.S. Prime Rate Notes

If you purchase a U.S. prime rate note, your note will bear interest at an interest rate equal to the U.S. prime rate and adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement.

The U.S. prime rate will be the rate, for the relevant interest determination date, published in H.15 opposite the heading “Bank prime loan.” If the U.S. prime rate cannot be determined as described above, the following procedures will apply:

- If the rate described above does not appear in H.15 by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from that source at that time, then the U.S. prime rate will be the rate, for the relevant interest determination date, as published in H.15 or another recognized electronic source used for the purpose of displaying that rate, under the heading “Bank prime loan.”
- If the rate described above does not appear in H.15 or another recognized electronic source by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from one of those sources at that time, then the U.S. prime rate will be the arithmetic mean of the following rates as they appear on the **Reuters screen US PRIME 1 page**: the rate of interest publicly announced by each bank appearing on that page as that bank’s prime rate or base lending rate, as of 11:00 A.M., New York City time, on the relevant interest determination date.
- If fewer than four of these rates appear on **the Reuters screen US PRIME 1 page**, the U.S. prime rate will be the arithmetic mean of the prime rates or base lending rates, as of the close of business on the relevant interest determination date, of three major banks in New York City selected by the calculation agent. For this purpose, the calculation agent will use rates quoted on the basis of the actual number of days in the year divided by a 360-day year.
- If fewer than three banks selected by the calculation agent are quoting as described above, the U.S. prime rate for the new interest period will be the U.S. prime rate in effect for the prior interest period. If the initial interest rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

SOFR Index Notes

If you purchase a SOFR Index note, your note will bear interest at an interest rate based on Compounded SOFR, unless otherwise specified in the relevant pricing supplement. In addition, when SOFR is the interest rate basis, the applicable SOFR rate will be adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement. SOFR is published by the Federal Reserve Bank of New York and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. The SOFR Index is published by the Federal Reserve Bank of New York and measures the cumulative impact of compounding SOFR on a unit of investment over time, with the initial value set to 1.00000000 on April 2, 2018, the first value date of SOFR. The SOFR Index value reflects the effect of compounding SOFR each business day and allows the calculation of compounded SOFR averages over custom time periods. The Federal Reserve Bank of New York notes on its publication page for the SOFR Index that use of the SOFR Index is subject to important limitations, indemnification obligations and disclaimers, including that the Federal Reserve Bank of New York may alter the methods of calculation, publication schedule, rate revision practices or availability of the SOFR Index at any time without notice. Unless otherwise specified in the relevant pricing supplement, “Compounded SOFR” will be determined by the calculation agent in accordance with the following formula:

$$\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}} - 1 \right) \times \frac{360}{d}$$

where:

“*SOFR Index_{Start}*” = For interest periods other than the initial interest period, the SOFR Index value on the preceding SOFR Interest Payment Determination Date, and, for the initial interest period, the SOFR Index value on the date that is two U.S. Government Securities Business Days before the first day of such initial interest period;

“*SOFR Index_{End}*” = The SOFR Index value on the SOFR Interest Payment Determination Date relating to the applicable interest payment date (or in the final interest period, relating to the maturity date or the redemption date); and

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

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

- (1) the SOFR Index value as published by the SOFR Administrator as such index appears on the SOFR Administrator’s Website at 3:00 p.m. (New York time) on such U.S. Government Securities Business Day (the “SOFR Determination Time”); provided that:
- (2) if a SOFR Index value does not so appear as specified in (1) above at the SOFR Determination Time, then: (i) if a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to SOFR, then the Compounded SOFR shall be the rate determined pursuant to the “SOFR Index Unavailable” provisions described below; or (ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to SOFR, then Compounded SOFR shall be the rate determined pursuant to the “Effect of a Benchmark Transition Event” provisions described below.

Notwithstanding anything to the contrary in the documentation relating to any SOFR Index notes we may issue, if the calculation agent determines on or prior to the relevant Reference Time that a Benchmark Transition Event and its related Benchmark Replacement Date (each as defined below) have occurred with respect to determining Compounded SOFR, then the benchmark replacement provisions set forth will thereafter apply to all determinations of the rate of interest payable on the SOFR Index notes.

For the avoidance of doubt, in accordance with the benchmark replacement provisions, after a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, the interest payable on the SOFR Index notes for each interest period will be an annual rate equal to the sum of the Benchmark Replacement (as defined below) and the applicable margin.

SOFR Index Unavailable Provisions. If a *SOFR Index_{Start}* or *SOFR Index_{End}* is not published on the associated SOFR Interest Payment Determination Date and a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to SOFR, “Compounded SOFR” means, for the applicable interest period for which such index is not available, the rate of return on a daily compounded interest investment calculated in accordance with the formula for SOFR Averages, and definitions required for such formula, published on the SOFR Administrator’s Website at <https://www.newyorkfed.org/markets/treasury-repo-reference-rates-information>. For the purposes of this provision, references in the SOFR Averages compounding formula and related definitions to “calculation period” shall be replaced with “Observation Period” and the words “that is, 30-, 90-, or 180- calendar days” shall be removed. If the daily SOFR (“SOFR_i”) does not so appear for any day “i” in the Observation Period, SOFR_i for such day “i” shall be SOFR published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the SOFR Administrator’s Website.

Effect of Benchmark Transition Event.

(a) *Benchmark Replacement.* If the calculation agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time (as defined herein) in respect of any determination of the Benchmark on any date, the Benchmark Replacement will replace the then-current Benchmark for all purposes relating to the SOFR Index notes in respect of such determination on such date and all determinations on all subsequent dates.

(b) *Benchmark Replacement Conforming Changes.* In connection with the implementation of a Benchmark Replacement, the calculation agent will have the right to make Benchmark Replacement Conforming Changes from time to time.

(c) *Decisions and Determinations.* Any determination, decision or election that may be made by the calculation agent or us pursuant to the benchmark replacement provisions described herein, including any determination with respect to 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 and, may be made in the calculation agent's sole discretion, notwithstanding anything to the contrary in this prospectus supplement and any pricing supplement;
- if made by us, will be made in our sole discretion;
- if made by the calculation agent, will be made after consultation with us, and the calculation agent will not make any such determination, decision or election to which we object; and
- shall become effective without consent from any other party.

Any determination, decision or election pursuant to the benchmark replacement provisions not made by the calculation agent will be made by us on the basis as described above. The calculation agent shall have no liability for not making any such determination, decision or election. In addition, we may designate an entity (which may be our affiliate) to make any determination, decision or election that we have the right to make in connection with the benchmark replacement provisions set forth in this prospectus supplement.

Certain Defined Terms. As used in this section entitled “—Interest Rates—SOFR Index Notes”:

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

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

- (1) the sum of: (a) an alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and (b) the Benchmark Replacement Adjustment;
- (2) the sum of: (a) the ISDA Fallback Rate and (b) the Benchmark Replacement Adjustment; and
- (3) provided that if (i) the Benchmark Replacement cannot be determined in accordance with clause (1) or (2) above as of the Benchmark Replacement Date or (ii) the calculation agent shall have determined that the ISDA Fallback Rate determined in accordance with clause (2) above is not an industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated floating rate notes at such time, then the Benchmark Replacement shall be the sum of: (a) the alternate rate of interest that has been selected by the calculation agent as the replacement for the then-current

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

- (1) the spread adjustment (which may be a positive or negative value or zero), or method for calculating or determining such spread adjustment that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;
- (2) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment; and
- (3) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the calculation agent 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 or interpretations of interest period, the timing and frequency of determining rates and making payments of interest, the rounding of amounts or tenors, and other administrative matters) that the calculation agent decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the calculation agent decides that adoption of any portion of such market practice is not administratively feasible or if the calculation agent determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the calculation agent determines is reasonably practicable).

“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.

For the avoidance of doubt, for purposes of the definitions of Benchmark Replacement Date and Benchmark Transition Event, references to Benchmark also include any reference rate underlying such Benchmark.

“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.

“Corresponding Tenor” with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Benchmark.

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

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

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

“Observation Period” means, in respect of each interest period, the period from, and including, the date two U.S. Government Securities Business Days preceding the first date in such interest period to, but excluding, the date two U.S. Government Securities Business Days preceding the interest payment date for such interest period (or in the final interest period, preceding the maturity date or the redemption date).

“Reference Time” with respect to any determination of the Benchmark means (1) if the Benchmark is Compounded SOFR, the SOFR Index Determination Time, as such time is defined above, and (2) if the Benchmark is not Compounded SOFR, the time determined by the calculation agent in accordance with the Benchmark Replacement Conforming Changes.

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

“SOFR Administrator” means the Federal Reserve Bank of New York (or a successor administrator of SOFR).

“SOFR Administrator’s Website” means the website of the Federal Reserve Bank of New York, currently at <http://www.newyorkfed.org>, or any successor source.

“SOFR Interest Payment Determination Date” means the date two U.S. Government Securities Business Days before each interest payment date or, in the case of the final interest period, the maturity date or the redemption date.

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

EURIBOR Notes

If you purchase a EURIBOR note, your note will bear interest at an interest rate equal to the interest rate for deposits in euro, designated as “EURIBOR” and sponsored jointly by the European Banking Federation and ACI—the Financial Market Association, or any company established by the joint sponsors for purposes of compiling and publishing that rate. In addition, when EURIBOR is the interest rate basis the EURIBOR base rate will be adjusted by the spread or spread multiplier, if any, specified in the relevant pricing supplement. EURIBOR will be determined in the following manner:

- EURIBOR will be the offered rate for deposits in euros having the index maturity specified in the relevant pricing supplement, beginning on the second euro business day after the relevant EURIBOR interest determination date, as that rate appears on *Reuters page EURIBOR01* as of 11:00 A.M., Brussels time, on the relevant EURIBOR interest determination date.
- If the rate described above does not appear on Reuters page EURIBOR01, EURIBOR will be determined on the basis of the rates, at approximately 11:00 A.M., Brussels time, on the relevant EURIBOR interest determination date, at which deposits of the following kind are offered to prime banks in the *euro-zone* interbank market by the principal euro-zone office of each of four major banks in that market selected by the calculation agent: euro deposits having the relevant index maturity, beginning on the relevant interest reset date, and in a representative amount. The calculation agent will request the principal euro-zone office of each of these banks to provide a quotation of its rate. If at least two quotations are provided, EURIBOR for the relevant EURIBOR interest determination date will be the arithmetic mean of the quotations.
- If fewer than two quotations are provided as described above, EURIBOR for the relevant EURIBOR interest determination date will be the arithmetic mean of the rates for loans of the following kind to leading euro-zone banks quoted, at approximately 11:00 A.M., Brussels time on that EURIBOR interest determination date, by three major banks in the euro-zone selected by the calculation agent: loans of euros having the relevant index maturity, beginning on the relevant interest reset date, and in a representative amount.
- If fewer than three banks selected by the calculation agent are quoting as described above, EURIBOR for the new interest period will be EURIBOR in effect for the prior interest period. If the initial interest rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

Treasury Rate Notes

If you purchase a treasury rate note, your note will bear interest at an interest rate equal to the treasury rate and adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement.

The treasury rate will be the rate for the auction, on the relevant treasury interest determination date, of treasury bills having the index maturity specified in the relevant pricing supplement, as that rate appears on *Reuters page USAUCTION 10* or *Reuters page USAUCTION11* under the heading “INVEST RATE”. If the treasury rate cannot be determined in this manner, the following procedures will apply:

- If the rate described above does not appear on either page by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from that source at that time, the treasury rate will be the *bond equivalent yield* of the rate, for the relevant interest determination date, for the type of treasury bill described above, as announced by the U.S. Department of the Treasury.
- If the auction rate described in the prior paragraph is not so announced by 3:00 P.M., New York City time, on the relevant interest calculation date, or if no such auction is held for the relevant week, then the treasury rate will be the bond equivalent yield of the rate, for the relevant treasury interest

determination date and for treasury bills having the specified index maturity, as published in H.15 under the heading “U.S. government securities/Treasury bills (secondary market).”

- If the rate described in the prior paragraph does not appear in H.15 by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from one of those sources at that time, then the treasury rate will be the rate, for the relevant treasury interest determination date and for treasury bills having the specified index maturity, as published in H.15, or another recognized electronic source used for displaying that rate, under the heading “U.S. government securities/Treasury bills (secondary market).”
- If the rate described in the prior paragraph does not appear in H.15 or another recognized electronic source by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from one of those sources at that time, the treasury rate will be the **bond equivalent yield** of the arithmetic mean of the following secondary market bid rates for the issue of treasury bills with a remaining maturity closest to the specified index maturity: the rates bid as of approximately 3:30 P.M., New York City time, on the relevant treasury interest determination date, by three primary U.S. government securities dealers in New York City selected by the calculation agent.
- If fewer than three dealers selected by the calculation agent are quoting as described in the prior paragraph, the treasury rate in effect for the new interest period will be the treasury rate in effect for the prior interest period. If the initial interest rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

CMT Rate Notes

If you purchase a CMT rate note, your note will bear interest at an interest rate equal to the CMT rate and adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement.

The CMT rate will be the following rate as published in H.15 opposite the heading “Treasury constant maturities,” as that rate is displayed on the **designated CMT Reuters page** under the heading “. . . Treasury Constant Maturities”, under the column for the **designated CMT index maturity**:

- if the designated CMT Reuters page is Reuters page FRBCMT, the rate for the relevant interest determination date; or
- if the designated CMT Reuters page is Reuters page FEDCMT, the weekly or monthly average, as specified in the relevant pricing supplement, for the week that ends immediately before the week in which the relevant interest determination date falls, or for the month that ends immediately before the month in which the relevant interest determination date falls, as applicable.

If the CMT rate cannot be determined in this manner, the following procedures will apply:

- If the applicable rate described above is not displayed on the relevant designated CMT Reuters page at 3:00 P.M., New York City time, on the relevant interest determination date, unless the calculation is made earlier and the rate is available from that source at that time, then the CMT rate will be the applicable treasury constant maturity rate described above—*i.e.*, for the designated CMT index maturity and for the relevant interest determination—as published in H.15 opposite the caption “Treasury constant maturities”.
- If the designated CMT Reuters page is FRBCMT and the applicable rate described above does not appear in H.15 by 3:00 P.M., New York City time, on the relevant interest determination date, unless the calculation is made earlier and the rate is available from one of those sources at that time, then the CMT rate will be the treasury constant maturity rate for the designated CMT index maturity and with reference to the relevant interest determination date, that:
 - is published by the Board of Governors of the Federal Reserve System, or the U.S. Department of the Treasury; and

- is determined by the calculation agent to be comparable to the rate that would otherwise have been published in H.15.
- If the designated CMT Reuters page is FEDCMT and the applicable rate described above does not appear in H.15 by 3:00 P.M., New York City time, on the relevant interest determination date, unless the calculation is made earlier and the rate is available from that source at that time, the CMT rate will be the treasury constant maturity rate for the one-week or one-month rate, as applicable, for the designated CMT index maturity and with reference to the relevant interest determination date, that is otherwise announced by the Federal Reserve Bank of New York for the week or month, as applicable, immediately preceding that interest determination date.
- If the designated CMT Reuters page is FRBCMT the rate described in the second preceding paragraph does not appear by 3:00 P.M., New York City time, on the relevant interest determination date, unless the calculation is made earlier and the rate is available from one of those sources at that time, then the CMT rate will be the yield to maturity of the arithmetic mean of the following secondary market bid rates for the most recently issued treasury notes having an original maturity equal to the designated CMT index maturity and a remaining term to maturity of not less than the designated CMT index maturity minus one year, and in a representative amount: the bid rates, as of approximately 3:30 P.M., New York City time, on the relevant interest determination date, of three primary U.S. government securities dealers in New York City selected by the calculation agent. In selecting these bid rates, the calculation agent will request quotations from five of these primary dealers and will disregard the highest quotation—or, if there is equality, one of the highest—and the lowest quotation—or, if there is equality, one of the lowest. If fewer than five but more than two such offered rates are provided, the CMT rate will be based on the arithmetic mean of the bid prices provided, and neither the highest nor lowest of such quotations will be eliminated. Treasury notes are direct, non-callable, fixed rate obligations of the U.S. government.
- If the designated CMT Reuters screen page is FEDCMT and the Federal Reserve Bank of New York does not publish a one-week or one-month rate, as applicable, for U.S. Treasury securities on the relevant interest determination date, unless the calculation is made earlier and the rate is available from one of those sources at that time, then the CMT rate will be the yield to maturity of the arithmetic mean of the following secondary market offered rates for the most recently issued treasury notes having an original maturity of approximately the designated CMT index maturity and a remaining term to maturity of not less than the designated CMT index maturity minus one year, and in a representative amount: the offered rates, as of approximately 3:30 P.M., New York City time, on the relevant interest determination date, of three primary U.S. government securities dealers in New York City selected by the calculation agent. In selecting these offered rates, the calculation agent will request quotations from five of these primary dealers and will disregard the highest quotation—or, if there is equality, one of the highest—and the lowest quotation—or, if there is equality, one of the lowest. If fewer than five but more than two such offered rates are provided, the CMT rate will be based on the arithmetic mean of the bid prices provided, and neither the highest nor lowest of such quotations will be eliminated.
- If the calculation agent is unable to obtain three quotations of the kind described in the prior two paragraphs, the CMT rate will be the yield to maturity of the arithmetic mean of the following secondary market bid rates for treasury notes with an original maturity longer than the designated CMT index maturity, with a remaining term to maturity closest to the designated CMT index maturity and in a representative amount: the bid rates, as of approximately 3:30 P.M., New York City time, on the relevant interest determination date, of three primary U.S. government securities dealers in New York City selected by the calculation agent. In selecting these bid rates, the calculation agent will request quotations from five of these primary dealers and will disregard the highest quotation (or, if there is equality, one of the highest) and the lowest quotation (or, if there is equality, one of the lowest).
- If fewer than five but more than two of these primary dealers are quoting as described in the prior paragraph, then the CMT rate for the relevant interest determination date will be based on the

arithmetic mean of the bid rates so obtained, and neither the highest nor the lowest of those quotations will be disregarded. If two treasury notes with an original maturity longer than the designated CMT index maturity have remaining terms to maturity that are equally close to the designated CMT index maturity, the calculation agent will obtain quotations for the treasury note with the shorter remaining term to maturity.

- If two or fewer primary dealers selected by the calculation agent are quoting as described above, the CMT rate in effect for the new interest period will be the CMT rate in effect for the prior interest period. If the initial interest rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

CMS Rate Notes

If you purchase a CMS rate note, your note will bear interest at an interest rate equal to the CMS rate and adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement.

The CMS rate will be the rate for U.S. dollar swaps with a maturity for a specified number of years, expressed as a percentage in the relevant pricing supplement, which appears on the *Reuters page ISDAFIX1* as of 11:00 a.m., New York City time, on the interest rate determination date.

- If the applicable rate described above does not appear by 11:00 a.m., New York City time, on the interest determination date, then the CMS rate will be a percentage determined on the basis of the mid-market, semi-annual swap rate quotations provided by five leading swap dealers in the New York City interbank market at approximately 11:00 a.m., New York City time, on the interest determination date. For this purpose, the semi-annual swap rate means the mean of the bid and offered rates for the semi-annual fixed leg, calculated on a 30/360 day count basis, of a fixed-for-floating U.S. dollar interest rate swap transaction with a term equal to the index maturity designated in the relevant pricing supplement commencing on the reset date and in a representative amount with an acknowledged dealer of good credit in the swap market, where the floating leg, calculated on an Actual/360 day count basis, as such rate may be determined in accordance with the provisions set forth below under “— SOFR Index Notes” with an index maturity of three months. The calculation agent will select the five swap dealers after consultation with us and will request the principal New York City office of each of those dealers to provide a quotation of its rate. If at least three quotations are provided, the CMS rate for that interest determination date will be the arithmetic mean of the quotations, eliminating the highest and lowest quotations or, in the event of equality, one of the highest and one of the lowest quotations.
- If fewer than three leading swap dealers selected by the calculation agent are quoting as described above, the CMS rate will remain the CMS rate in effect on that interest rate determination date or, if that interest rate determination date is the first reference rate determination date, the initial interest rate.

Federal Funds Rate Notes

If you purchase a federal funds rate note, your note will bear interest at an interest rate equal to the federal funds rate and adjusted by the spread or spread multiplier, if any, indicated in the relevant pricing supplement.

The federal funds rate will be the rate for U.S. dollar federal funds as of the relevant interest determination date, as published in H.15 under the heading “Federal Funds (effective)”, as that rate is displayed on *Reuters page FEDFUNDS1* under the heading “EFFECT”. If the federal funds rate cannot be determined in this manner, the following procedures will apply:

- If the rate described above is not displayed on Reuters page FEDFUNDS1 by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from that source at that time, then the federal funds rate, as of the relevant interest determination date, will be the rate described above as published in H.15, or another recognized electronic source used for displaying that rate, under the heading “Federal Funds (Effective).”

- If the rate described above is not displayed on Reuters page FEDFUNDS1 and does not appear in H.15 or another recognized electronic source by 3:00 P.M., New York City time, on the relevant interest calculation date, unless the calculation is made earlier and the rate is available from one of those sources at that time, the federal funds rate will be the arithmetic mean of the rates for the last transaction in overnight, U.S. dollar federal funds arranged, before 9:00 A.M., New York City time, on the business day following the relevant interest determination date, by three leading brokers of U.S. dollar federal funds transactions in New York City selected by the calculation agent.
- If fewer than three brokers selected by the calculation agent are quoting as described above, the federal funds rate in effect for the new interest period will be the federal funds rate in effect for the prior interest period. If the initial interest rate has been in effect for the prior interest period, however, it will remain in effect for the new interest period.

Special Rate Calculation Terms

In this subsection entitled “—Interest Rates”, we use several terms that have special meanings relevant to calculating floating interest rates. We define these terms as follows:

The term “bond equivalent yield” means a yield expressed as a percentage and calculated in accordance with the following formula:

$$\text{bond equivalent yield} = \frac{D \times N}{360 - (D \times M)} \times 100$$

where

“D” means the annual rate for treasury bills quoted on a bank discount basis and expressed as a decimal;

“N” means 365 or 366, as the case may be; and

“M” means the actual number of days in the applicable interest reset period.

The term “business day” means, for any note, a day that meets all the following applicable requirements:

- for all notes, is a Monday, Tuesday, Wednesday, Thursday or Friday that is neither a legal holiday nor a day on which banking institutions are authorized or required by law or executive order to close in The City of New York or Toronto, Ontario;
- if the note has a specified currency other than U.S. dollars or euros, is also a day on which banking institutions are not authorized or obligated by law, regulation or executive order to close in the applicable principal financial center; and
- if the note is a EURIBOR note or has a specified currency of euros, is also a euro business day.

The term “designated CMT index maturity” means the index maturity for a CMT rate note and will be the original period to maturity of a U.S. treasury security—either 1, 2, 3, 5, 7, 10, 20 or 30 years—specified in the relevant pricing supplement.

The term “designated CMT Reuters page” means the Reuters page mentioned in the relevant pricing supplement that displays treasury constant maturities as reported in H.15. If no Reuters page is so specified, then the applicable page will be Reuters page FEDCMT. If Reuters page FEDCMT applies but the relevant pricing supplement does not specify whether the weekly or monthly average applies, the weekly average will apply.

The term “euro business day” means any day on which the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET2) System, or any successor system, is open for business.

The term “euro-zone” means, at any time, the region comprised of the member states of the European Economic and Monetary Union that, as of that time, have adopted a single currency in accordance with the Treaty on European Union of February 1992.

“H.15” means the daily update of H.15 available through the worldwide website of the Board of Governors of the Federal Reserve System, at <http://www.federalreserve.gov/releases/h15>, or any successor site or publication.

The term “index maturity” means, with respect to a floating rate note, the period to maturity of the instrument or obligation on which the interest rate formula is based, as specified in the relevant pricing supplement.

“London business day” means any day on which dealings in the relevant index currency are transacted in the London interbank market.

The term “money market yield” means a yield expressed as a percentage and calculated in accordance with the following formula:

$$\text{money market yield} = \frac{D \times 360}{360 - (D \times M)} \times 100$$

where

“D” means the annual rate for commercial paper quoted on a bank discount basis and expressed as a decimal; and

“M” means the actual number of days in the relevant interest reset period.

The term “principal financial center” means the capital city of the country to which an index currency relates (or the capital city of the country issuing the specified currency, as applicable), except that with respect to U.S. dollars, Australian dollars, Canadian dollars, South African rands and Swiss francs, the “principal financial center” means The City of New York, Sydney, Toronto, Johannesburg and Zurich, respectively, and with respect to euros the principal financial center means London.

The term “representative amount” means an amount that, in the calculation agent’s judgment, is representative of a single transaction in the relevant market at the relevant time.

“Reuters screen US PRIME 1 page” means the display on the “US PRIME 1” page on the Reuters 3000 Xtra service, or any successor service, or any replacement page or pages on that service, for the purpose of displaying prime rates or base lending rates of major U.S. banks.

“Reuters page” means the display on the Reuters 3000 Xtra service, 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.

If, when we use the terms designated CMT Reuters page, H.15, Reuters screen US PRIME 1 page, Reuters screen LIBOR Page or Reuters page, we refer to a particular heading or headings on any of those pages, those references include any successor or replacement heading or headings as determined by the calculation agent.

Special Provisions Related to Bail-inable Notes

The indenture includes provisions applicable to bail-inable notes. The relevant pricing supplement will specify whether or not your note is a bail-inable note. See “Description of Debt Securities we May Offer –

Special Provisions Related to Bail-inable Debt Securities.” in the accompanying prospectus for a description of certain provisions related to bail-inable notes.

Payment of Additional Amounts

Unless otherwise specified in the relevant pricing supplement or product prospectus supplement, all payments made by or on behalf of the Bank under or with respect to the notes will be made free and clear of and without withholding or deduction for or on account of any present or future tax, duty, levy, impost, assessment or other governmental charge (including penalties, interest and other liabilities related thereto) imposed or levied by or on behalf of the Government of Canada or any province or territory thereof or by any authority or agency therein or thereof having power to tax (hereafter “Canadian taxes”), unless the Bank is required to withhold or deduct Canadian taxes by law or by the interpretation or administration thereof. If the Bank is so required to withhold or deduct any amount for or on account of Canadian taxes from any payment made under or with respect to the notes, the Bank will pay to each holder of such notes as additional interest such additional amounts (“additional amounts”) as may be necessary so that the net amount received by each such holder after such withholding or deduction (and after deducting any Canadian taxes on such additional amounts) will not be less than the amount such holder would have received if such Canadian taxes had not been withheld or deducted, except as described below. However, no additional amounts will be payable with respect to a payment made to a holder (such holder, an “excluded holder”) in respect of the beneficial owner thereof:

- with which the Bank does not deal at arm’s length (for the purposes of the Income Tax Act (Canada)) at the time of the making of such payment or which is entitled to the payment in respect of a debt or other obligation to pay an amount to a person with which the Bank does not deal at arm’s length (within the meaning of the Income Tax Act (Canada)) at the time of making such payment;
- which is a “specified shareholder” of the Bank, or which does not deal at arm’s length (within the meaning of the Income Tax Act (Canada)) with a “specified shareholder” of the Bank as defined in subsection 18(5) of the Income Tax Act (Canada);
- which is subject to such Canadian taxes by reason of the holder or beneficial owner being a resident, domiciliary or national of, engaged in business or maintaining a permanent establishment or other physical presence in or otherwise having some connection with Canada or any province or territory thereof otherwise than by the mere holding of such notes or the receipt of payments thereunder;
- which is subject to such Canadian taxes by reason of the holder’s or beneficial owner’s failure to comply with any certification, identification, documentation or other reporting requirements if compliance is required by law, regulation, administrative practice or an applicable treaty as a precondition to exemption from, or a reduction in the rate of deduction or withholding of, such Canadian taxes (provided that the Bank advises the trustees and the holders of such notes then outstanding of any change in such requirements);
- with respect to any estate, inheritance, gift, sale, transfer, personal property or similar tax or other governmental charge;
- which is subject to such Canadian taxes by reason of the legal nature of the holder or beneficial owner disentitling such holder or beneficial owner to the benefit of an applicable treaty if and to the extent that the application of such treaty would have resulted in the reduction or elimination of any Canadian taxes as to which additional amounts would have otherwise been payable to the holder;
- which failed to duly and timely comply with a timely request by the Bank to provide information, documents, certification or other evidence concerning the holder’s or beneficial owner’s nationality, residence, entitlement to treaty benefits, identity or connection with Canada or any political subdivision or authority thereof, if and to the extent that due and timely compliance with such request would have resulted in the reduction or elimination of any Canadian taxes as to which additional amounts would have otherwise been payable to a recipient or beneficial owner but for this clause; or

- which is a fiduciary or partnership or person other than the sole beneficial owner of such payment to the extent that the Canadian taxes would not have been imposed on such payment had such holder been the sole beneficial owner of such notes.

In addition, no additional amounts will be payable on account of:

- any tax, assessment or other governmental charge that is imposed otherwise than by withholding by the Bank or the Paying Agent from the payment;
- any tax, assessment or other governmental charge that would not have been imposed but for a change in law, regulation, or administrative or judicial interpretation that becomes effective more than 15 days after the payment becomes due or is duly provided for, whichever occurs later;
- any tax, assessment or other governmental charge that would not have been imposed but for the presentation by the holder, where presentation is required, for payment on a date more than 30 days after the date on which payment became due and payable or the date on which payment thereof is duly provided for, whichever occurs later;
- any tax, assessment or other governmental charge imposed under any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986; or
- any combination of any of the foregoing exceptions.

For the avoidance of doubt, the Bank will not have any obligation to pay any holders additional amounts on any Canadian tax which is payable otherwise than by deduction or withholding from payments made under or in respect of the notes.

The Bank will also:

- make such withholding or deduction; and
- remit the full amount deducted or withheld to the relevant authority in accordance with applicable law.

The Bank will furnish to the holders of the notes, within 60 days after the date the payment of any Canadian taxes is due pursuant to applicable law, certified copies of tax receipts or other documents evidencing such payment by such person.

The Bank will indemnify and hold harmless each holder of the notes (other than an excluded holder) from and against, and upon written request reimburse each such holder for the amount (excluding any additional amounts that have previously been paid by the Bank with respect thereto) of:

- any Canadian taxes so levied or imposed and paid by such holder as a result of payments made by or on behalf of the Bank under or with respect to the applicable Notes;
- any liability (including penalties, interest and expenses) arising therefrom or with respect thereto; and
- any Canadian taxes imposed with respect to any reimbursement under the preceding two bullet points, but excluding any such Canadian taxes on such holder's net income.

In any event, no additional amounts or indemnity amounts will be payable under the provisions described above in respect of any Note in excess of the additional amounts and the indemnity amounts which would be required if, at all relevant times, the holder of such note were a resident of the United States for purposes of and was entitled to the benefits of the Canada-U.S. Income Tax Convention (1980), as amended, including any protocols thereto. As a result of the limitation on the payment of additional amounts and indemnity amounts discussed in the preceding sentence, the additional amounts or indemnity amounts received by certain holders of notes may be less than the amount of Canadian taxes withheld or deducted or the amount of Canadian taxes (and

related amounts) levied or imposed giving rise to the obligation to pay the indemnity amounts, as the case may be, and, accordingly, the net amount received by such holders of the notes will be less than the amount such holders would have received had there been no such withholding or deduction in respect of Canadian taxes or had such Canadian taxes (and related amounts) not been levied or imposed.

Wherever in the senior debt securities indenture governing the terms of any notes there is mentioned, in any context, the payment of principal, interest, if any, or any other amount payable under or with respect to such note, such mention shall be deemed to include mention of the payment of additional amounts to the extent that, in such context, additional amounts are, were or would be payable in respect thereof.

In the event of the occurrence of any transaction or event resulting in a successor to the Bank, all references to Canada in the preceding paragraphs of this subsection shall be deemed to be references to the jurisdiction of organization of the successor entity.

Payments of principal and interest in respect of the notes are subject in all cases to any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "Code") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, official interpretations thereof, or any law implementing an intergovernmental approach thereto.

Other Provisions; Addenda

Any provisions relating to the notes, including the determination of the interest rate basis, calculation of the interest rate applicable to a floating rate note, its interest payment dates, any redemption or repayment provisions, or any other term relating thereto, may be modified and/or supplemented by the terms as specified under "Other Provisions" on the face of the applicable notes or in an addendum relating to the applicable notes, if so specified on the face of the applicable notes, and, in each case, in the relevant pricing supplement.

CERTAIN INCOME TAX CONSEQUENCES

United States Taxation

For a general overview of the tax consequences of owning debt securities that we offer, please see the discussion in the accompanying prospectus under “United States Taxation.”

However, the tax consequences of any particular note depend on its terms, and the tax treatment of each note will be described in the relevant pricing supplement. Consequently, except to the extent the pricing supplement indicates otherwise, you should not rely on the general overview of tax consequences in the accompanying prospectus in deciding whether to invest in any note. Moreover, in all cases, you should consult with your own tax advisor concerning the consequences of investing in and holding any particular note you propose to purchase.

Canadian Taxation

For a general overview of the tax consequences of owning debt securities that we offer, please see the discussion in the accompanying prospectus under “Canadian Taxation.”

The Canadian federal income tax considerations may be supplemented, amended and/or replaced in a pricing supplement to this prospectus supplement, based on the terms and conditions of the securities issued pursuant to such pricing supplement. Accordingly, prospective purchasers of securities should consult their own tax advisors having regard to their own particular circumstances, and in any event where securities are otherwise issued without disclosure of Canadian federal income tax considerations.

SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

We and Scotia Capital (USA) Inc., as agent, have entered into a distribution agreement with respect to the notes. Subject to certain conditions, the agent has agreed to use its reasonable efforts to solicit purchases of the notes. We have the right to accept offers to purchase notes and may reject any proposed purchase of the notes. The agent may also reject any offer to purchase notes. We will pay the agent a commission at the time of settlement of any sale of notes by the Bank as a result of a solicitation made by the agent, in an amount as may be agreed between the agent and the Bank. The commission will be specified in the relevant pricing supplement.

Scotia Capital (USA) Inc. is an affiliate of the Bank and may resell notes to or through another of our affiliates, as selling agent.

We may also sell notes to the agent, who will purchase the notes as principal for its own account. In that case, the agent will purchase the notes at a price equal to the issue price specified in the relevant pricing supplement, less a discount to be agreed with us at the time of the offering.

The agent may resell any notes it purchases as principal to other brokers or dealers at a discount, which may include all or part of the discount the agent received from us. If all the notes are not sold at the initial offering price, the agent may change the offering price and the other selling terms.

We may also sell notes directly to investors. We will not pay commissions on notes we sell directly.

The agent, whether acting as agent or principal, may be deemed to be an “underwriter” within the meaning of the Securities Act. We have agreed to indemnify the agent against certain liabilities, including liabilities under the Securities Act, or to contribute to payments made in respect of those liabilities.

If the agent sells notes to dealers who resell to investors and the agent pays the dealers all or part of the discount or commission they receive from us, those dealers may also be deemed to be “underwriters” within the meaning of the Securities Act.

Unless otherwise indicated in any pricing supplement, payment of the purchase price of notes, other than notes denominated in a non-U.S. dollar currency, will be required to be made in funds immediately available in The City of New York. The notes will be the Same Day Funds Settlement System at The Depository Trust Company and, to the extent the secondary market trading in the notes is effected through the facilities of such depository, such trades will be settled in immediately available funds.

We may appoint additional agents with respect to the notes. Any other agents will be named in the relevant pricing supplements from time to time. Any such appointment will be made in writing and signed by the Bank and the appointed agent or agents. The agent referred to above and any additional agents may engage in commercial banking and investment banking and other transactions with and perform services for the Bank and our affiliates in the ordinary course of business.

Unless otherwise specified in the relevant pricing supplement, the notes will be a new issue of securities, and there will be no established trading market for any note before its original issue date. We do not plan to list the notes on a securities exchange or quotation system.

We have been advised by the agent named above that it may make a market in the notes offered through them and this prospectus supplement may be used by Scotia Capital (USA) Inc. and any other agent named in a relevant pricing supplement in connection with offers and sales of the notes in market-making transactions. In a market-making transaction, an agent or other person resells a note it acquires from other holders after the original offering and sale of the note. However, neither Scotia Capital (USA) Inc. nor any of our other affiliates nor any other agent named in the relevant pricing supplement that makes a market is obligated to do so, and any of them may stop doing so at any time without notice. No assurance can be given as to the liquidity or trading market for the notes. Resales of this kind may occur in the open market or may be privately negotiated, at prevailing market

prices at the time of resale or at related or negotiated prices. In these transactions, an agent may act as principal or agent, including as agent for the counterparty in a transaction in which Scotia Capital (USA) Inc. or another agent acts as principal, or as agent for both counterparties in a transaction in which Scotia Capital (USA) Inc. does not act as principal. Any agent may receive compensation in the form of discounts and commissions, including from both counterparties in some cases. Other affiliates of the Bank (in addition to Scotia Capital (USA) Inc.) and the Bank may also engage in transactions of this kind and may use this prospectus supplement for this purpose. The Bank and any of its affiliates may engage in market-making transactions only in those jurisdictions in which it has all necessary governmental and regulatory authorizations for such activity.

Because Scotia Capital (USA) Inc. is an affiliate of the Bank, it has a “conflict of interest” within the meaning of FINRA Rule 5121. Consequently, any offering conducted pursuant to this prospectus supplement will be conducted in compliance with the provisions of FINRA Rule 5121. Scotia Capital (USA) Inc. will not confirm initial sales to any discretionary accounts over which it has authority without the prior specific written approval of the customer.

The aggregate initial offering price specified on the cover of this prospectus supplement relates to the initial offering of new notes we may issue on and after the date of this prospectus supplement. This amount does not include notes that may be resold in market-making transactions. The latter includes notes that we may issue going forward as well as notes we have previously issued.

The Bank does not expect to receive any proceeds from market-making transactions, except to the extent it is entitled to proceeds of its own sales of notes in such transactions. The Bank does not expect that any agent that engages in these transactions will pay any proceeds from its market-making resales to The Bank.

Information about the trade and settlement dates, as well as the purchase price, for a market-making transaction will be provided to the purchaser in a separate confirmation of sale.

Unless the Bank or an agent informs you in your confirmation of sale that your note is being purchased in its original offering and sale, you may assume that you are purchasing your note in a market-making transaction.

In this prospectus supplement, the term “this offering” means the initial offering of the notes made in connection with their original issuance. This term does not refer to any subsequent resales of notes in market-making transactions.

The agent mentioned above and any other agent or agents named in the relevant pricing supplement may engage in over-allotment, stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves syndicate sales in excess of the offering size, which creates a syndicate short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate covering transactions involve purchases of the notes in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit reclaiming a selling concession from a syndicate member when the notes originally sold by such syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Such stabilizing transactions, syndicate covering transactions and penalty bids may stabilize, maintain or otherwise affect the market price of the notes, which may be higher than it would otherwise be in the absence of such transactions. No agent is required to engage in these activities, and may end any of these activities at any time.

In addition to offering notes through the agent mentioned above or any other agent or agents named in the relevant pricing supplement as discussed above, other medium-term notes that have terms substantially similar to the terms of the notes offered by this prospectus supplement may in the future be offered, concurrently with the offering of the notes, on a continuing basis by the Bank. Any of these notes sold pursuant to the distribution agreement or sold by the Bank directly to investors will reduce the aggregate amount of notes which may be offered by this prospectus supplement.

DOCUMENTS FILED AS PART OF THE REGISTRATION STATEMENT

In addition to the documents specified in the accompanying prospectus under “Documents Incorporated by Reference,” the following documents were filed with the Securities and Exchange Commission and incorporated by reference as part of the registration statement to which this prospectus supplement relates (the “Registration Statement”): (i) the Distribution Agreement, dated December 29, 2021, between us and the agent, (ii) the Calculation Agency Agreement, dated as of December 29, 2021, between us and Computershare Trust Company, N.A., (iii) the Exchange Rate Agency Agreement, dated as of December 29, 2021, between us and Computershare Trust Company, N.A. and (iv) a second supplemental indenture, dated as of December 27, 2021 among the Bank, Computershare Trust Company of Canada, as Canadian trustee and Computershare Trust Company, N.A., as U.S. trustee. Such documents will not be incorporated by reference into this prospectus supplement or the accompanying prospectus. Additional exhibits to the Registration Statement to which this prospectus supplement relates may be subsequently filed in reports on Form 40-F or on Form 6-K that specifically state that such materials are incorporated by reference as exhibits in Part II of the Registration Statement.

No dealer, salesperson or other person has been authorized to give any information or to make any representation not contained in this prospectus supplement, the accompanying prospectus or any pricing supplement and, if given or made, such information or representation must not be relied upon as having been authorized by the Bank or the agent. This prospectus supplement, the accompanying prospectus and any pricing supplement do not constitute an offer to sell or a solicitation of an offer to buy any securities other than the securities described in the relevant pricing supplement nor do they constitute an offer to sell or a solicitation of an offer to buy the securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. The delivery of this prospectus supplement, the accompanying prospectus and any pricing supplement at any time does not imply that the information they contain is correct as of any time subsequent to their respective dates.

US\$50,000,000,000

Scotiabank[®]

The Bank of Nova Scotia

Senior Medium-Term Notes, Series I

December 29, 2021
