Pricing Supplement

(To the Product Supplement dated May 28, 2021, and the Base Prospectus dated May 28, 2021)

SUBJECT TO COMPLETION, DATED JUNE [21], 2021

DUAL DIRECTIONAL NOTES LINKED TO THE WORST-OF MATERIALS SELECT SECTOR SPDR $^{\otimes}$ FUND AND VANGUARD REAL ESTATE ETF



BNP PARIBAS

Terms used in this "Pricing Supplement" are described or defined in the Product Supplement. The Notes will have terms described in the Product Supplement and Base Prospectus, as supplemented by this Pricing Supplement. If the terms described in this Pricing Supplement are different from or inconsistent with those described in the Product Supplement or Base Prospectus, the terms described in this Pricing Supplement will supersede. Before you decide to invest in the Notes, we urge you to read this Pricing Supplement together with the Product Supplement and Base Prospectus, each of which can be accessed via the hyperlink below:

http://eqdpo.bnpparibas.com/USMTNPD

Issuer: BNP Paribas.

Guarantor: BNP Paribas acting through its NY Branch.

Calculation Agent: BNP Paribas Securities Corp. ("BNPP Securities").

Principal Amount: $\{[\bullet]^{\neq}$.

Status of the Notes: Senior Preferred Notes.

Pricing Date: June [30], 2021^{\neq} .

Initial Valuation Date: June [30], 2021 [±].

Issue Date: July [6], 2021* ≠.

Final Valuation Date: June [30], 2026* \(^{\pm}\).

Maturity Date: July [6], 2026* ≠.

Business Days for Payment: New York - Modified Following Business Day.

Initial Offering Price: 100.00%.

Coupon Rate: 0.00% (there are no coupon payments).

Underlying Assets: Materials Select Sector SPDR® Fund or "XLB" (Bloomberg symbol "XLB UP <Equity>") and Vanguard Real Estate ETF or "VNQ" (Bloomberg symbol "VNQ UP <Equity>").

Initial Price: The Closing Price of the respective Underlying Asset on the Initial Valuation Date, which is equal to \$[●] for XLB and \$[●] for VNQ.

Final Price: The Closing Price of the respective Underlying Asset on the Final Valuation Date.

Worst Performing Underlying Asset: The Underlying Asset whose Underlying Asset Performance is the lowest.

Underlying Asset Performance: (Final Price - Initial Price) / Initial Price, expressed as a percentage.

Absolute Underlying Asset Performance: The absolute value of the Underlying Asset Performance. The Absolute Underlying Asset Performance will always be a positive value or zero.

Redemption Amount at Maturity:

- If the Final Price of the Worst Performing Underlying Asset is greater than or equal to its Initial Price, you will receive, for each \$1,000 principal amount of Notes:
 - \$1,000 x (100% + Participation Rate x Underlying Asset Performance of the Worst Performing Underlying Asset).
- If the Final Price of the Worst Performing Underlying Asset is less than its Initial Price but greater than or equal to the Barrier Price, you will receive, for each \$1,000 principal amount of Notes:
 - \$1,000 x (100% + Absolute Underlying Asset Performance of the Worst Performing Underlying Asset).
- If the Final Price of the Worst Performing Underlying Asset is less than the Barrier Price, you will receive, for each \$1,000 principal amount of Notes:
 - \$1,000 x (100% + Underlying Asset Performance of the Worst Performing Underlying Asset).

In this case, you will receive less than the principal amount of your Notes, and you could receive zero.

All payments on the Notes are subject to the creditworthiness of the Issuer and Guarantor.

Participation Rate: [264]%.

Barrier Price: For each Underlying Asset, [70]% of its Initial Price or \$[●]

for XLB and \$[●] for VNQ.

Denominations: The Notes will be issued in denominations of \$1,000. Minimum trading size is \$1,000. The Notes may only be transferred in amounts of \$1,000 and increments of \$1,000 thereafter.

CUSIP: 05601JBM1. **ISIN**: US05601JBM18.

Series: 6614.

* Subject to postponement in the event of a Market Disruption Event as described under "Underlying Assets — Securities or Linked Shares — Market Disruption Events Relating to Notes with an Equity Security or Interests in Exchange-Traded Funds as the Underlying Asset" for XLB and VNQ in the Product Supplement.

[≠] To be determined on the Pricing Date.

Per Note[100]%[0.75]%[99.25]%Total\$[•]\$[•]\$[•]

The estimated value of the Notes at the time the terms of the Notes are set on the Pricing Date (as determined by reference to pricing models used by BNPP Securities and taking into account the Issuer's credit spreads) is expected to be between \$928.92 and \$938.25 per \$1,000 principal amount, which is less than the Initial Offering

¹ The price to the public for any single purchase by an investor in certain trust accounts, who is not being charged the full selling concession or fee by other dealers of approximately [0.75]%, is [99.25]%. The price to the public for all other purchases of Notes is [100]%.

² BNP Paribas or one of our affiliates may pay varying underwriting discounts of up to [0.75]%. In addition, BNPP Securities may pay selected broker-dealers additional marketing, referral or other fees of up to 0% in consideration for providing education, structuring or other services with respect to the distribution of the Notes. In no case will the sum of the commissions and fees exceed [0.75]%.

Price. The value of the Notes at any time will reflect many factors and cannot be predicted; however, the price (not including BNPP Securities' customary bid and ask spreads) at which BNPP Securities would initially buy or sell Notes (if it makes a market, which it is not obligated to do) will exceed the estimated value of the Notes as determined by reference to these models. The amount of the excess will decline on a straight line basis over the period from the trade date through [1], 2021.

See "Selected Risk Considerations" beginning on page [5] of this Pricing Supplement.

BNPP Securities, the Lead Dealer for the Notes, is an affiliate of BNP Paribas. As such, BNPP Securities has a "conflict of interest" in this offering within the meaning of FINRA Rule 5121. Consequently, the offering is being conducted in compliance with the provisions of Rule 5121. BNPP Securities is not permitted to make sales in this offering to an account over which it exercises discretionary authority without the prior specific written approval of the account holder.

The Issuer has not been registered under the Investment Company Act of 1940, as amended (the "Investment Company Act"), and the Notes and the Guarantee have not been, and will not be, registered under the Securities Act of 1933, as amended (the "Securities Act"), or the state securities laws of any state of the United States or the securities laws of any other jurisdiction and are being offered pursuant to the registration exemption contained in Section 3(a)(2) of the Securities Act.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of the Notes or determined that this Pricing Supplement is truthful or complete. Any representation to the contrary is a criminal offense. Under no circumstances shall this Pricing Supplement constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these Notes, in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to qualification under the securities laws of any such jurisdiction.

The Notes constitute unconditional liabilities of the Issuer and the Guarantee constitutes an unconditional obligation of the Guarantor. The Notes and the Guarantee are not bank deposits and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other federal agency.

BNP PARIBAS SECURITIES CORP.

ADDITIONAL TERMS

General

You should read this Pricing Supplement together with the Product Supplement and Base Prospectus. This Pricing Supplement, together with the documents listed above, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in "Selected Risk Considerations" herein and "Risk Factors" in the Base Prospectus and Product Supplement, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes.

An investment in the Notes entails significant risks relating to the Notes not associated with similar investments in a conventional debt security, including those described below. You should read the following information about these risks, together with the other information in this Pricing Supplement, the Product Supplement and the Base Prospectus before investing in the Notes.

Events of Default

Events of Default, as defined in Condition 8(a) in the Base Prospectus, shall apply to the Notes and the amount payable to a holder of the Notes upon any acceleration will be equal to the Redemption Amount at Maturity, determined as if the Notes matured on the date of acceleration. Condition 5(g)(i) in the Base Prospectus shall apply to the Notes and, for the purposes of such Condition 5(g)(i), the Final Redemption Amount shall mean the Redemption Amount at Maturity.

Hypothetical Examples

The following table and examples illustrate hypothetical payments on a \$1,000 investment in the Notes. The numbers appearing in the examples have been rounded for ease of analysis. These examples are provided for purposes of illustration only and we make no representations or warranty as to which of the Underlying Assets will be the Worst Performing Underlying Asset for purposes of calculating the Redemption Amount at Maturity. The actual payment amounts received by investors and the total return on the Notes resulting from this payment will depend on several variables, including the Initial Price and the Final Price of the Worst Performing Underlying Asset each as determined by the Calculation Agent. All payments on the Notes are subject to the creditworthiness of the Issuer and Guarantor.

For this table of hypothetical payments at maturity, we have assumed the following:

- · No Market Disruption Events, adjustments, or Events of Default occur during the term of the Notes
- The Worst Performing Underlying Asset is XLB
- Initial Price of the Worst Performing Underlying Asset: \$[80.74]
- Barrier Price of XLB: \$[56.5180] ([70]% x the Initial Price)
- Participation Rate: [264]%

Example	Hypothetical Underlying Asset Performance of the Worst Performing Underlying Asset	Hypothetical Final Price of the Worst Performing Underlying Asset	Hypothetical Payment at Maturity	Hypothetical Return on the Notes
	100%	\$161.48	\$3,640	264%
	90%	\$153.41	\$3,376	237.60%
	80%	\$145.33	\$3,112	211.20%
	70%	\$137.26	\$2,848	184.80%
	60%	\$129.18	\$2,584	158.40%
(1)	50%	\$121.11	\$2,320	132%
	40%	\$113.04	\$2,056	105.60%
	30%	\$104.96	\$1,792	79.20%
	20%	\$96.89	\$1,528	52.80%
(2)	10%	\$88.81	\$1,264	26.40%
(3)	0%	\$80.74	\$1,000	0%
(4)	-10%	\$72.67	\$1,100	10%
	-20%	\$64.59	\$1,200	20%

(5)	-30%	\$56.52	\$1,300	30%
(6)	-31%	\$55.71	\$690	-31%
	-40%	\$48.44	\$600	-40%
(7)	-50%	\$40.37	\$500	-50%
	-60%	\$32.30	\$400	-60%
	-70%	\$24.22	\$300	-70%
	-80%	\$16.15	\$200	-80%
	-90%	\$8.07	\$100	-90%
	-100%	\$0	\$0	-100%

The following examples illustrate how the total returns set forth in the table above are calculated.

Example 1: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to 50%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is 50%, the payment at maturity is equal to \$2,320 per \$1,000 principal amount of Notes.

Example 2: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to 10%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is 10%, the payment at maturity is equal to \$1,264 per \$1,000 principal amount of Notes.

Example 3: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to 0%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is 0%, the payment at maturity is equal to \$1,000 per \$1,000 principal amount of Notes.

Example 4: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to -10%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is -10%, the payment at maturity is equal to \$1,100 per \$1,000 principal amount of Notes.

Example 5: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to -30%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is -30%, the payment at maturity is equal to \$1,300 per \$1,000 principal amount of Notes.

Example 6: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to -31%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is -31%, the payment at maturity is equal to \$690 per \$1,000 principal amount of Notes.

Example 7: On the Final Valuation Date, the Underlying Asset Performance of the Worst Performing Underlying Asset is equal to -50%. Because the Underlying Asset Performance of the Worst Performing Underlying Asset is -50%, the payment at maturity is equal to \$500 per \$1,000 principal amount of Notes.

SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Underlying Assets. Some of these risks are explained in more detail in the "Risk Factors" section of the Product Supplement, including the risk factors discussed under the following headings:

- "Risk Factors Risks Relating to All Notes";
- "Risk Factors Additional Risks Relating to Notes With Underlying Assets That Are Equity Securities or Interests in Exchange-Traded Funds, That Contain Equity Securities or That are Based in Part on Equity Securities or Interests in Exchange-Traded Funds";
- "Risk Factors Additional Risks Relating to Notes Which Pay No Coupon";
- "Risk Factors Additional Risks Relating to Notes That Are Not Fully Principal Protected or Are Contingently Protected";
- "Risk Factors Additional Risks Relating to Notes which Contain a Multiplier";
- "Risk Factors Additional Risks Relating to Notes With More Than One Underlying Asset, Where The Performance Of The Notes Is Linked To The Performance Of Only One Underlying Asset"; and
- "Risk Factors Additional Risks Relating to Notes with a Barrier Percentage or a Barrier Level".

Among other things, you should consider the following:

Assuming No Changes in Market Conditions, Our Creditworthiness or Any Other Relevant Factors, the Estimated Value of the Notes on the Pricing Date (as Determined by Reference to Pricing Models Used by BNPP Securities) Will Be Significantly Less than the Initial Offering Price – The Initial Offering Price for the Notes will exceed the estimated value of the Notes as of the time the terms of the Notes are set on the Pricing Date, as determined by reference to BNPP Securities' pricing models and taking into account our credit spreads. Such expected estimated value on the Pricing Date is set forth on the cover of this Pricing Supplement; after the Pricing Date, the estimated value as determined by reference to these models will be affected by changes in market conditions, the issuer's creditworthiness and other relevant factors. The price at which BNPP Securities would initially buy or sell your Notes (if BNPP Securities makes a market, which it is not obligated to do) will also exceed the estimated value of your Notes as determined by reference to these models. As agreed by us and the distribution participants, the amount of the excess will decline on a straight line basis over the period from the date hereof through the applicable date set forth on the cover. Thereafter, if BNPP Securities buys or sells your Notes it will do so at prices that reflect the estimated value determined by reference to such pricing models at that time. The price at which BNPP Securities will buy or sell your Notes at any time also will reflect its then current bid and ask spread for similar sized trades of structured notes.

In estimating the value of the Notes as of the time the terms of the Notes are set on the Pricing Date, as disclosed on the front cover of this Pricing Supplement, BNPP Securities' pricing models consider certain variables, including principally our credit spreads, interest rates (forecasted, current and historical rates), volatility, price sensitivity analysis and the time to maturity of the Notes. These pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. As a result, the actual value you would receive if you sold your Notes in the secondary market, if any, to others may differ, perhaps materially, from the estimated value of your Notes determined by reference to BNPP Securities' models due to, among other things, any differences in pricing models or assumptions used by others. See "Many Economic and Market Factors Will Impact the Market Value of the Notes" in this Pricing Supplement.

The difference between the estimated value of the Notes as of the time the terms of the Notes are set on the Pricing Date and the Initial Offering Price is a result of certain factors, including principally the underwriting discount and commissions, the expenses incurred in creating, documenting and marketing the Notes, and an estimate of the difference between the amounts we pay to BNPP Securities and the amounts BNPP Securities pays to us in connection with the Notes. We pay to BNPP Securities amounts based on what we would pay to holders of a non-structured note with a similar maturity. In return for such payment, BNPP Securities pays to us the amounts we owe under the Notes.

In addition to the factors discussed above, the value and quoted price of the Notes at any time will reflect many factors and cannot be predicted. If BNPP Securities makes a market in the Notes, the price quoted by BNPP Securities would reflect any changes in market conditions and other relevant factors, including any deterioration in our creditworthiness or perceived creditworthiness. These changes may adversely affect the value of your Notes, including the price you may receive for your Notes in any market making transaction. To the extent that BNPP Securities makes a market in the Notes, the quoted price will reflect the estimated value determined by reference to BNPP Securities' pricing models at that time, plus or minus its then current bid and ask spread for similar sized trades of structured notes (and subject to the declining excess amount described above).

If at any time a third party dealer quotes a price to purchase the Notes or otherwise values the Notes, that price may be significantly different (higher or lower) than any price quoted by BNPP Securities. You should read "Many Economic and Market Factors Will Impact the Market Value of the Notes" below.

Furthermore, if you sell any of the Notes, you will likely be charged a commission for secondary market transactions, or the price will likely reflect a dealer discount. This commission or discount will further reduce the proceeds you would receive for your Notes in a secondary market sale.

There is no assurance that BNPP Securities, or any other party, will be willing to purchase the Notes at any price. In this regard, BNPP Securities is not obligated to make a market in the Notes. See "The Notes May Lack Liquidity" below.

• Suitability of Notes for Investment – You should reach a decision to invest in the Notes after carefully considering, with your advisors, the suitability of the Notes in light of your investment objectives and the specific information set out in this Pricing Supplement, the

Product Supplement and the Base Prospectus. Neither the Issuer nor any dealer participating in the offering makes any recommendation as to the suitability of the Notes for investment.

- Any Amount Payable Under the Notes Is Subject to our Credit Risk, and our Credit Ratings and Credit Spreads May Adversely Affect the Market Value of the Notes The Notes are the senior unsecured obligations of the issuer, BNP Paribas. Any payments to be made on the Notes depend on the ability of the Issuer and Guarantor to satisfy its obligations as they come due. Investors are subject to the credit risk, and to changes in the market's view of the creditworthiness of the Issuer and the Guarantor, and in the event the Issuer or Guarantor were to default on its obligation, you may not receive any amounts owed to you under the terms of the Notes. The credit ratings of the Issuer and the Guarantor are an assessment of their ability to pay their obligations, including those on the Notes. Consequently, any actual or anticipated declines in our credit ratings or increase in the credit spreads charged by the market for taking our credit risk is likely to adversely affect the value of the Notes.
- The Notes and the Guarantee May Be Subject to Write-Down, Variation, Suspension or Conversion to Equity Either in the Context Of, Or Outside Of, a Resolution Procedure Applicable to the Issuer Pursuant to the EU Bank Recovery and Resolution Directive (the "BRRD"), as transposed into French law by a decree-law dated August 20, 2015, resolution authorities have the power to place the institution in resolution at the point at which the resolution authority determines that (i) the institution individually, or the group to which it belongs, is failing or likely to fail, (ii) there is no reasonable prospect that private action would prevent the failure and (iii) a resolution action is necessary in the public interest. If the institution is placed in resolution, resolution authorities have the power inter alia to ensure that capital instruments, including senior debt instruments, such as Senior Preferred Notes including these Notes, absorb losses of the issuing institution, through the write-down or conversion to equity of such instruments (the "Bail-In Tool"). The Bail-In Tool might also apply to a guarantee obligation such as the Guarantee. Please see the discussion under the heading "Risks Related to the Notes General Risk relating to the Notes The Notes and the Notes Guarantees may be subject to write-down, variation, suspension or conversion to equity either in the context of, or outside of, a resolution procedure applicable to the Issuer" in the Base Prospectus.
- Your Investment in the Notes May Result in a Loss The Notes do not guarantee any return of principal. If the Final Price of the Worst Performing Underlying Asset is less than the Barrier Price you will lose the benefit of the Absolute Underlying Asset Performance of the Worst Performing Underlying Asset. In such case, you will be fully exposed to any decrease in the Final Price of the Worst Performing Underlying Asset compared to the Initial Price of the Worst Performing Underlying Asset and your Redemption Amount at Maturity will be less, and may be significantly less, than your principal amount of Notes. You could receive zero at maturity. Other than the initial payment for the principal amount of the Note, in no event will you be required to make any additional payments to the Issuer.
- No Principal Protection The principal amount of your investment is not protected and you may receive less, and possibly significantly less, than the amount you invest. You may lose up to 100% of your investment in the Notes. All payments on the Notes are subject to the creditworthiness of the Issuer and Guarantor.
- Your Investment is Exposed to a Decline in the Level of Each Underlying Asset Your return on the Notes, if any, and the Redemption Amount at Maturity is not linked to a basket consisting of the Underlying Assets. The Redemption Amount at Maturity will be determined by reference to the performance of each individual Underlying Asset. Unlike an instrument with a return linked to a basket, in which risk is mitigated and diversified among all of the basket components, you will be exposed equally to the risks related to each of the Underlying Assets. Poor performance by either Underlying Asset over the term of the Notes may negatively affect your Redemption Amount at Maturity and will not be offset or mitigated by a positive performance by the other Underlying Asset.
- The Notes Do Not Pay Interest We will not pay interest on the Notes. You may receive less at maturity than you could have earned on ordinary interest-bearing debt securities with similar maturities, including other of our debt securities, since the full return of the principal amount of your investment at maturity is based on whether the Underlying Asset Performance of the Worst Performing Underlying Asset is greater than, equal to, or less than [-30]%, i.e., whether the Final Price of the Worst Performing Underlying Asset is greater than, equal to or less than the Barrier Price. Because the Redemption Amount at Maturity may be less than the amount originally invested in the Notes, the return on the Notes (the effective yield to maturity) may be negative. Even if it is positive, the return payable on the Note may not be enough to compensate you for any loss in value due to inflation and other factors relating to the value of money over time.
- Investing in the Notes Is Not the Same as Investing in the Underlying Assets or Contracts relating to the Underlying Assets The Redemption Amount at Maturity on the Notes is based on the Underlying Asset Performance of the Worst Performing Underlying Asset on the Final Valuation Date and whether the Final Price of the Worst Performing Underlying Asset is greater than, equal to or less than the Barrier Price. The return on the Notes may not reflect the return you would realize if you directly invested in the Underlying Assets or any other exchange-traded or over-the-counter instruments based on the Underlying Assets.
- No Dividend Payments or Voting Rights As a holder of the Notes, you will not have voting rights or rights to receive cash dividends or other distributions or other rights that holders of a direct investment in securities comprising each of the Underlying Assets would have. Furthermore, a direct investment in the Underlying Assets is likely to have tax consequences that are different from an investment in your Notes.
- We Cannot Control the Actions of the Issuers of the Tracked Securities, Including Actions That Could Adversely Affect the Value of Your Notes We will have no ability to control the actions of the companies whose underlying securities are owned by the ETF (the "Tracked Securities"). None of the proceeds you pay us will go to any of the companies as issuer of the Tracked Securities, and none of those companies will be involved in the offering of the Notes in any way. Neither those companies nor we will have any obligation to consider your interests as a holder of the Notes in taking any corporate actions that might affect the value of your Notes. You will not have any right against the issuer of any Tracked Securities as a shareholder of such issuer solely because you are a holder of the Notes.

- Certain Built-In Costs Are Likely to Adversely Affect the Value of the Notes Prior to Maturity While the payment at maturity described in this Pricing Supplement is based on the full Principal Amount of your Notes, the Initial Offering Price of the Notes includes the agent's commission and the cost of hedging our obligations under the Notes through one or more of our affiliates. As a result, the price, if any, at which BNPP Securities and other affiliates of BNP Paribas may be willing to purchase Notes from you in secondary market transactions will likely be lower than the Initial Offering Price, and any sale prior to the Maturity Date could result in a substantial loss to you. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.
- The Notes May Lack Liquidity The Notes will not be listed on any securities exchange. BNPP Securities intends to offer to purchase the Notes in the secondary market but is not required to do so. Even if there is a secondary market, it may not provide enough liquidity to allow you to trade or sell the Notes prior to maturity. Because other dealers are not likely to make a secondary market for the Notes, the price at which you may be able to trade your Notes is likely to depend on the price, if any, at which BNPP Securities is willing to buy the Notes. You should, therefore, be willing to hold the Notes to maturity.
- Potential Conflicts We and our affiliates play a variety of roles in connection with the issuance of the Notes, including acting as Calculation Agent and hedging our obligations under the Notes. In performing these duties, the economic interests of the Calculation Agent and other affiliates of ours are potentially adverse to your interests as an investor in the Notes. In addition, we or one or more of our affiliates may publish research reports or otherwise express opinions or recommendations with respect to the Underlying Assets issuer and these reports may or may not recommend that investors buy or hold the Underlying Assets. As a prospective purchaser of the Notes, you should undertake an independent investigation of the Underlying Assets issuer that in your judgment is appropriate to make an informed decision with respect to an investment in the Notes.
- Taxes We intend to treat each Note as a cash-settled derivative contract with respect to the Underlying Assets. Please see the discussion under the heading "Taxation United States Federal Income Taxation United States Holders Consequences of Reverse Convertible Notes and Forward Contract Notes Consequences of Forward Contract Notes" in the Base Prospectus.

Under the above agreed-to characterization, a United States holder's tax basis in a Forward Contract Note generally will equal the holder's cost for that Forward Contract Note. Upon the sale or other taxable disposition (including payment in cash on the Maturity Date) of a Forward Contract Note, a United States holder generally will recognize gain or loss equal to the difference between the amount realized on the sale or other taxable disposition and the United States holder's tax basis in the Forward Contract Note. Such gain or loss generally will be long-term capital gain or loss if the United States holder has held the Forward Contract Note for more than one year at the time of disposition. Pursuant to the terms of the Notes, you agree to treat the Notes in accordance with this characterization for all U.S. federal, state, and local income tax purposes.

However, because there are no regulations, published rulings or judicial decisions addressing the characterization for U.S. federal, state, and local income tax purposes of securities with terms that are substantially the same as those of the Notes, other characterizations and treatments are possible. In particular, it is possible that the Notes will be characterized as "contingent payment debt instruments" in which case the tax consequences to you would be different, and could be less favorable, than if the Notes were characterized as prepaid derivative contracts. For a description of the tax consequences of the ownership of contingent payment debt instruments, please see the discussion under the heading "Taxation – United States Federal Income Taxation – United States Holders – Consequences of Notes Characterized As Debt – Linked Debt Notes and Other Notes Providing for Contingent Payments" in the Base Prospectus.

The Internal Revenue Code contains a provision, Section 1260, which sets forth rules which are applicable to what it refers to as "constructive ownership transactions." Due to the manner in which it is drafted, the precise applicability of Section 1260 to any particular transaction is often uncertain. In general, a "constructive ownership transaction" includes a contract under which an investor will receive payment equal to or credit for the future value of any equity interest in a regulated investment company and other certain pass-thru entities (such as shares of the Underlying Assets (the "Underlying Shares")). Under the "constructive ownership" rules, if an investment in the Notes is treated as a "constructive ownership transaction," any long-term capital gain recognized by a United States holder in respect of a Note will be recharacterized as ordinary income to the extent such gain exceeds the amount of "net underlying long-term capital gain" (as defined in Section 1260) of the United States holder determined as if the United States holder had acquired Underlying Shares on the Issue Date of the Note at fair market value and sold them at fair market value on the Maturity Date (if the Note was held until the Maturity Date) or on the date of sale or other taxable disposition of the Note (the "Excess Gain"). In addition, an interest charge will also apply to any deemed underpayment of tax in respect of any Excess Gain to the extent such gain would have resulted in gross income inclusion for the United States holder in taxable years prior to the taxable year of the sale or other taxable disposition (including payment in cash on the Maturity Date) of the Note (assuming such income accrued at a constant rate equal to the applicable federal rate as of the date of sale or other taxable disposition of the Note). Although the matter is not clear, there exists a risk that an investment in the Notes will be treated as a "constructive ownership transaction." United States holders should consult their tax advisors regarding the potential application of the "constructive ownership" rules.

Pursuant to regulations released by the U.S. Department of the Treasury, Foreign Account Tax Compliance Act (FATCA) withholding (as described in "Taxation – United States Federal Income Taxation – Foreign Account Tax Compliance Act" in the Base Prospectus) will generally apply to obligations that are issued on or after July 1, 2014; therefore, the Notes will generally be subject to these withholding tax rules. Pursuant to recently proposed regulations, the U.S. Department of Treasury has indicated its intent to eliminate the requirements under FATCA of withholding on gross proceeds from the sale, exchange, redemption, maturity or other disposition of relevant financial instruments. The U.S. Department of Treasury has indicated that taxpayers may rely on these proposed regulations pending their finalization.

Individuals that are either (a) a U.S. citizen, (b) a resident alien for any part of the year, (c) a nonresident alien that has made an election to be treated as a resident alien for purposes of filing a joint U.S. federal income tax return or (d) a nonresident alien who is a *bona fide* resident of American Samoa or Puerto Rico and certain entities that own "specified foreign financial assets" with an aggregate value in

excess of \$50,000 on the last day of the taxable year (or with an aggregate value in excess of \$75,000 at any time during the taxable year), will generally be required to file an information report on IRS Form 8938 with respect to such assets with their U.S. federal tax returns. "Specified foreign financial assets" include any financial accounts maintained by foreign financial institutions, as well as any of the following, but only if they are held for investment and not held in accounts maintained by financial institutions: (i) stocks and securities issued by non-United States persons, (ii) financial instruments and contracts that have non-United States issuers or counterparties, and (iii) interests in foreign entities. Prospective purchasers are urged to consult their tax advisors regarding the application of this legislation to their ownership of Notes.

Pursuant to Section 871(m) of the Internal Revenue Code, the Treasury Department has issued regulations which impose a withholding tax at a rate of 30% (subject to reduction under an applicable income tax treaty, provided that the non-United States holder has provided the documentation required to claim benefits under such treaty) on amounts attributable to U.S.-source dividends (including, potentially, adjustments to account for extraordinary dividends) that are paid or "deemed paid" under certain equity-linked instruments ("ELIs"), if certain other conditions are met ("dividend equivalents"). Dividend equivalents include payments made pursuant to certain specified equity-linked instruments ("specified ELIs") that reference one or more U.S. stocks on which a U.S.-source dividend is paid, whether or not any payment on the specified ELI corresponds to the U.S.-source dividend payment. Under these regulations, if the Notes are specified ELIs, then withholding is required when cash payments are made on the Notes or upon the maturity or other disposition of the Notes to non-United States holders. If withholding is required, the non-United States holder will not be entitled to additional amounts with respect to amounts so withheld.

A specified ELI is (i) a "simple" ELI that has a delta of 0.8 or greater with respect to an underlying security or (ii) a "complex" ELI that meets a substantial equivalence test with respect to an underlying security. A "simple" ELI is an ELI for which, with respect to each underlying security, (i) all amounts to be paid or received on maturity, exercise, or any other payment determination date are calculated by reference to a single, fixed number of shares of the underlying security, provided that the number of shares can be ascertained when the contract is issued, and (ii) the contract has a single maturity or exercise date with respect to which all amounts (other than any upfront payment or any periodic payments) are required to be calculated with respect to the underlying security. A "complex" ELI is any ELI that is not a "simple" ELI. Delta is the ratio of the change in the fair market value of the contract to a small change in the fair market value of the number of shares of the underlying security referenced by the ELI. The substantial equivalence test assesses whether a complex contract substantially replicates the economic performance of the underlying security by comparing, at various testing prices for the underlying security, the differences between the expected changes in value of the complex contract and its initial hedge with the difference between the expected changes in value of a "simple contract benchmark" (as defined in the final regulations) with a delta of 0.8 and its initial hedge. In addition, ELIs that reference a "qualified index" (as defined in the final regulations) will not be specified ELIs.

These regulations generally will apply to any specified ELI that has a delta of one and is issued, or significantly modified and treated as retired and reissued, on or after January 1, 2017. If a specified ELI does not have a delta of one, then these regulations generally will apply if the specified ELI is issued, or significantly modified and treated as retired and reissued, on or after January 1, 2023.

We have determined that, as of the date of this Pricing Supplement, this withholding on dividend equivalents should not apply to the Notes. In certain limited circumstances, however, non-United States holders should be aware that it is possible for non-United States holders to be liable for tax under these rules with respect to a combination of transactions treated as having been entered into in connection with each other even when no withholding is required. Non-United States holders should consult their tax advisors regarding these regulations.

- Many Economic and Market Factors Will Impact the Value of the Notes In addition to the price of the Underlying Assets on any day, the value of the Notes will be affected by a number of economic and market factors that may either offset or magnify each other, including:
 - · supply and demand for the Notes, including inventory positions held by BNP Paribas or any other market makers;
 - the expected volatility of the Underlying Assets;
 - the time to maturity of the Notes;
 - the dividend rate on the securities underlying the Underlying Assets;
 - interest and yield rates in the market generally;
 - a variety of economic, financial, political, regulatory or judicial events;
 - other events (including domestic or global health concerns, including the outbreak of contagious or pandemic diseases, such as the recent coronavirus); and
 - · our creditworthiness, including actual or anticipated downgrades in our credit ratings.

These factors interrelate in complex ways, and the effect of one factor on the market value of your Notes may offset or enhance the effect of another factor in an unpredictable manner.

- Market Disruption Events and Adjustments The Final Price, Final Valuation Date, Maturity Date, and the payment at maturity, among others, are subject to adjustment as described in the following sections of the Product Supplement:
 - For a description of Market Disruption Events as well as the consequences of that Market Disruption Event, see "Underlying Assets Securities or Linked Shares Market Disruption Events Relating to Notes with an Equity Security or Interests in Exchange Traded Funds as the Underlying Asset"; and

- For a description of further adjustments that may affect the Underlying Asset, see "Underlying Assets Securities or Linked Shares Share Adjustments Relating to Notes with an Equity Security or Interests in Exchange Traded Funds as the Underlying Asset Antidilution Adjustments" and "Underlying Assets Securities or Linked Shares Adjustments Relating to Notes with an Equity Security or with Interests in Exchange Traded Funds".
- An ETF May Underperform its Underlying Index The performance of an ETF may not replicate the performance of, and may underperform, the index that it is designed to track (the "Underlying Index"). Unlike its Underlying Index, an ETF will reflect transaction costs and fees that will reduce its relative performance. Moreover, it is also possible that an ETF may not fully replicate or may, in certain circumstances, diverge significantly from the performance of its Underlying Index; for example, due to the temporary unavailability of certain securities in the secondary market, the performance of any derivative instruments contained in the ETF, differences in trading hours between the ETF and securities comprising the Underlying Index or due to other circumstances. Because the return on your Notes is linked to the performance of the ETFs and not the related Underlying Indices, the return on your Notes may be less than that of an alternative investment linked directly to the Underlying Indices.
- If the Price of the Underlying Assets or Underlying Securities Changes, the Market Value of the Notes May Not Change in the Same Manner The Notes may trade quite differently from the performance of the Underlying Assets or the Underlying Securities. Changes in the price of the Underlying Assets or the Underlying Securities may not result in a comparable change in the market value of the Notes.
- The Redemption Amount at Maturity on Your Notes is Not Based on the Prices of the Underlying Assets at Any Time Other than the Final Valuation Date The Underlying Asset Performance of the Worst Performing Underlying Asset will be based solely on the Final Price of the Worst Performing Underlying Asset on the Final Valuation Date relative to its Initial Price (subject to adjustments as described in the Product Supplement). Therefore, if the prices of the Worst Performing Underlying Asset drop precipitously on the Final Valuation Date, the Redemption Amount at Maturity, if any, that you will receive for your Notes may be significantly less than it would otherwise have been had the Redemption Amount at Maturity been linked to the prices of the Worst Performing Underlying Asset at a time prior to such drop. Although the prices of the Worst Performing Underlying Asset on the Maturity Date or at other times during the life of your Notes may be higher than the Final Price of the Worst Performing Underlying Asset on the Final Valuation Date, you will not benefit from the Closing Prices of Worst Performing Underlying Asset at any time other than on the Final Valuation Date.
- An Investment In The Securities Will Be Subject To Risks Associated with the Real Estate Industry All of the stocks included in VNQ are issued by companies involved directly or indirectly in the real estate industry. The value of real estate and, consequently, companies involved in the real estate industry may be affected by many complex factors that interrelate with each other in complex and unpredictable ways. Such factors may include, but are not limited to, general economic and political conditions, liquidity in the real estate market, rising or falling interest rates, consumer confidence, federal state and local laws, governmental actions and the ability of borrowers to obtain financing for real estate development or to repay their loans. Any negative developments in any such factor may negatively affect the value of companies included in VNQ and, consequently, may adversely affect the Underlying Asset and the value of the Notes linked to the Worst Performing Underlying Asset.
- The Select Sector Funds Involve Sector Concentration Risk XLB is a Select Sector SPDR® Fund (a "Select Sector Fund"). The Select Sector Indices upon which the Select Sector Funds are based together comprise all of the companies in the S&P 500® Index. The investment objective of each Select Sector Fund is to provide investment results that, before expenses, correspond generally to the price and yield performance of publicly traded equity securities of companies in one particular sector or group of industries, as represented by a specified Select Sector Index. Accordingly, the performance of each Select Sector Fund will not benefit from the diversification that could result if such funds held securities issued by companies that operate in multiple sectors. The performance of companies that operate in any particular sector is subject to a number of complex and unpredictable factors such as industry competition, government action and regulation, geopolitical events and supply and demand for the products and services offered by such company. Any adverse development in the relevant sector tracked by any Select Sector Fund may have a material adverse effect on the securities held in the portfolio of such Select Sector Fund and, as a result, may have a material adverse effect on the price of such Select Sector Fund, the Index Level and the value of your Notes.
- XLB Is Subject to Passive Strategy/Index Risk According to the prospectus for XLB, XLB is managed with a passive investment strategy, attempting to track the performance of an unmanaged index of securities. This differs from an actively managed fund, which typically seeks to outperform a benchmark index. As a result, XLB may hold constituent securities of the relevant Underlying Index regardless of the current or projected performance of a specific security or a particular industry or market sector. Maintaining investments in securities regardless of market conditions or the performance of individual securities could cause the return of to be lower than if XLB employed an active strategy.
- XLB Is Subject to Index Tracking Risk According to the prospectus for XLB, while XLB aims to track the performance of the relevant Underlying Index as closely as possible (i.e., achieve a high degree of correlation with the relevant Underlying Index), the return of XLB may not match or achieve a high degree of correlation with the return of the relevant Underlying Index due to operating expenses, transaction costs, cash flows, regulatory requirements and operational inefficiencies. For example, it may take several business days for additions and deletions to the relevant Underlying Index to be reflected in the portfolio composition of an ETF.
- XLB is Subject to Equity Investing Risk According to the prospectus for XLB, an investment in XLB involves risks similar to those of investing in any fund of equity securities, such as market fluctuations, changes in interest rates and perceived trends in stock prices.
- XLB is Subject to Non-Diversification Risk According to the Prospectus for XLB, XLB is non-diversified and may invest a larger percentage of its assets in securities of a few issuers or even a single issuer than that of a diversified fund. As a result, the performance of XLB may be disproportionately impacted by the performance of relatively few securities.

- No Ownership Rights Relating to XLB Your return on the Notes will not reflect the return you would realize if you actually owned shares of XLB or the assets that comprise XLB. The return on your investment, which is partially based on the percentage change in XLB, is not the same as the total return you would receive based on the purchase of the shares of XLB or the assets that comprise XLB.
- There Are Liquidity and Management Risks Associated with XLB Although shares of XLB is listed for trading on a national securities exchange and a number of similar products may have been traded on various national securities exchanges for varying periods of time, there is no assurance that an active trading market will continue for the shares of XLB or that there will be liquidity in the trading market. XLB is subject to management risk, which is the risk that a fund's investment strategy, the implementation of which is subject to a number of constraints, may not produce the intended results. Pursuant to the fund's investment strategy or otherwise, its investment advisor may add, delete or substitute the assets held by it. Any of these actions could adversely affect the price of the shares of XLB and consequently the value of the Notes.
- XLB is Subject to Materials Sector Risk According to the Series Trust's Prospectus, XLB's assets will be concentrated in the materials sector, which means XLB will be more affected by the performance of the materials sector than a fund that is more diversified. Many companies in this sector are significantly affected by the level and volatility of commodity prices, the exchange value of the dollar, import controls, worldwide competition, environmental policies and consumer demand. At times, worldwide production of industrial materials has exceeded demand as a result of over-building or economic downturns, leading to poor investment returns or losses. Other risks may include liabilities for environmental damage and general civil liabilities, depletion of resources, and mandated expenditures for safety and pollution control. The basic industries sector may also be affected by economic cycles, technical progress, labor relations, and government regulations.
- Risks Associated With Real Estate Investment Trusts Will Affect The Value Of The Securities The Vanguard Real Estate ETF includes the securities of REITs. REITs invest primarily in income producing real estate or real estate related loans or interests. Investments in REITs, though not direct investments in real estate, are still subject to the risks associated with investing in real estate. The following are some of the conditions that might impact the structure of and cash flow generated by REITs and, consequently, the value of REITs and, in turn, the Vanguard Real Estate ETF: a decline in the value of real estate properties; extended vacancies of properties; increases in property and operating taxes; increased competition or overbuilding; a lack of available mortgage funds or other limits on accessing capital; tenant bankruptcies and other credit problems; limitation on rents, including decreases in market rates for rents; changes in zoning laws and governmental regulations; costs resulting from the clean-up of, and legal liability to third parties for damages resulting from environmental problems; investments in developments that are not completed or that are subject to delays in completion; risks associated with borrowing; changes in interest rates; casualty and condemnation losses; and uninsured damages from floods, earthquakes or other natural disasters.
- The Vanguard Real Estate ETF Recently Transitioned To Tracking A New Underlying Index Which Could Reduce Its Performance And Limit The Utility Of Its Historical Performance —Effective February 1, 2018, the Vanguard Real Estate ETF ceased tracking the MSCI U.S. REIT Index and began tracking the MSCI US Investable Market Real Estate 25/50 Transition Index (the "Transition Real Estate Index"), on an interim basis, in the first phase of a two-phase underlying index change. Beginning on July 25, 2018, the Vanguard Real Estate ETF adopted the MSCI US Investable Market Real Estate 25/50 Index (the "Target Real Estate Index") as its benchmark. The principal difference between (a) the MSCI U.S. REIT Index and (b) the Transition Real Estate Index and the Target Real Estate Index is that the former represents the performance of equity REIT securities, whereas the latter also represent the performance of additional specialized REITs and real estate management and development companies. As a result of this transition, the Vanguard Real Estate ETF will be exposed to risks associated with investing both in publicly traded equity REITs and other real estate-related investments. Because the Vanguard Real Estate ETF began tracking an index that includes additional specialized REITs and real estate management and development companies may adversely affect the performance of the Vanguard Real Estate ETF and the Basket.

Furthermore, the historical performance of the Vanguard Real Estate ETF may be of limited use in evaluating the Vanguard Real Estate ETF's past performance, as there is limited historical information at this time to reflect the Vanguard Real Estate ETF's tracking of the Target Real Estate Index. The Target Real Estate Index could result in lower investment returns or different levels of volatility than those of the former underlying index over any period of time.

THE UNDERLYING ASSETS

Below is a description of the Underlying Assets. Unless otherwise stated, all information contained herein regarding the Underlying Assets is derived from publicly available sources and is provided for informational purposes only. We have not independently verified, and have not confirmed the accuracy or completeness of, such information. Neither the Issuer, the Guarantor nor any of its affiliates assumes any responsibilities for the adequacy or accuracy of information about the Underlying Assets. You should make your own investigation into the Underlying Assets.

Description of Materials Select Sector SPDR® Fund

Investment Objective

The Materials Select Sector SPDR® Fund seeks investment results that correspond generally to the price and yield performance, before fees and expenses, of publicly traded equity securities of companies in the Materials sector, as represented by the Materials Select Sector Index. The Materials Select Sector Index is one of the Select Sector Indices. Specifically, the Materials Select Sector Index is a modified market capitalization-based index and is intended to track the movements of companies that are components of the S&P 500® Index which are involved in the following industries: chemicals; metals & mining; paper & forest products; containers & packaging; and construction materials. As of December 31, 2012, the Materials Select Sector Index was comprised of 30 stocks. For additional information about the Materials Select Sector Index, see the section entitled "The Select Sector Indices" above.

Investment Strategy - Replication

The Materials Select Sector SPDR® Fund employs a replication strategy in attempting to approximate the performance of Materials Select Sector Index, which means that the Materials Select Sector SPDR® Fund typically invests in substantially all of the securities represented in the Materials Select Sector Index in approximately the same proportions as the Materials Select Sector Index. There may, however, be instances where SSgA FM may choose to overweight another stock in the Materials Select Sector Index, purchase securities not included in the Materials Select Sector Index that SSgA FM believes are appropriate to substitute for a security included in the Materials Select Sector Index or utilize various combinations of other available investment techniques in seeking to track the Materials Select Sector Index. Under normal market conditions, the Materials Select Sector SPDR® Fund generally invests substantially all, but at least 95%, of its total assets in the securities composing the Materials Select Sector Index. In addition, the Materials Select Sector SPDR® Fund may invest in cash and cash equivalents or money market instruments, such as repurchase agreements and money market funds (including money market funds advised by SSgA FM). Swaps, options and futures contracts, convertible securities and structured securities may be used by the Materials Select Sector SPDR® Fund in seeking performance that corresponds to the Materials Select Sector Index and in managing cash flows. SSgA FM anticipates that, under normal circumstances, it may take several business days for additions and deletions to the Materials Select Sector Index to be reflected in the portfolio composition of the Materials Select Sector SPDR® Fund. The Board of Trustees of the Select Sector Trust may change the Materials Select Sector SPDR® Fund's investment strategy and certain other policies without shareholder approval.

There may, however, be instances where SSgA FM will utilize a sampling strategy. Sampling means that SSgA FM will use quantitative analysis to select securities, including securities in the relevant index, outside of the index and derivatives, which have a similar investment profile as the relevant index in terms of key risk factors, performance attributes and other characteristics. These include industry weightings, market capitalization, and other financial characteristics of securities.

Correlation

The Materials Select Sector Index is a theoretical financial calculation, while the Materials Select Sector SPDR® Fund is an actual investment portfolio. The performance of the Materials Select Sector SPDR® Fund and the Materials Select Sector Index will vary somewhat due to operating expenses, transaction costs, cash flows, regulatory requirements and operational inefficiencies. For example, it may take several business days for additions and deletions to the Materials Select Sector Index to be reflected in the portfolio composition of the Materials Select Sector SPDR® Fund. A figure of 100% would indicate perfect correlation. Any correlation of less than 100% is called "tracking error."

Historical Performance of XLB

The following graph sets forth the daily closing prices of XLB from June 20, 2016 through June 18, 2021. We obtained XLB closing prices below from Bloomberg, L.P. We make no representation or warranty as to the accuracy or completeness of the information obtained from Bloomberg, L.P. The historical prices of XLB are provided for informational purposes only. You should not take the historical prices of XLB as an indication of future performance, which may be better or worse than the prices set forth below. The closing price of XLB on June 18, 2021 was \$[80.74].

Daily Closing Prices of Materials Select Sector SPDR Fund



Description of Vanguard Real Estate ETF

The Vanguard Real Estate ETF is issued by Vanguard Specialized Funds, a registered open-end management investment company. The Vanguard Real Estate ETF is an exchange traded fund that seeks to track the performance of a benchmark index that measures the performance of publicly traded equity REITs and other real estate-related investments, which is currently the MSCI US Investable Market Real Estate 25/50 Index. Information provided to or filed with the Securities and Exchange Commission (the "SEC") by the Vanguard Real Estate ETF under the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 002-88116 and 811-03916 and can be accessed through the SEC's website at www.sec.gov. In addition, information may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents. None of such publicly available information is incorporated by reference into this pricing supplement. The Vanguard Real Estate ETF is listed on the NYSE Arca, Inc. under the ticker symbol "VNQ."

In addition, information about the Vanguard Real Estate ETF may be obtained from other sources, including, but not limited to, the fund sponsor's website (including information regarding (a) the Vanguard Real Estate ETF's top ten constituents and their weightings; (b) returns of the Vanguard Real Estate ETF and underlying index for certain periods; and (c) the fees paid to the fund sponsor). We are not incorporating by reference into this pricing supplement the website or any material it includes. Neither we nor the agent makes any representation that such publicly available information regarding the Vanguard Real Estate ETF is accurate or complete.

This pricing supplement relates only to the securities offered hereby and does not relate to the Vanguard Real Estate ETF. We have derived all disclosures contained in this pricing supplement regarding the Vanguard Real Estate ETF from the publicly available documents described in the preceding paragraph. In connection with the offering of the securities, neither we nor the agent has participated in the preparation of such documents or made any due diligence inquiry with respect to the Vanguard Real Estate ETF. Neither we nor the agent has independently verified the accuracy or completeness of any information with respect to the Vanguard Real Estate ETF in connection with the offer and sale of the securities. Furthermore, we cannot give any assurance that all events occurring prior to the date hereof (including events that would affect the accuracy or completeness of the publicly available documents described in the preceding paragraph) that would affect the trading price of the Vanguard Real Estate ETF (and therefore the price of the Vanguard Real Estate ETF at the time we price the securities) have been publicly disclosed. Subsequent disclosure of any such events or the disclosure of or failure to disclose material future events concerning the Vanguard Real Estate ETF could affect any payments on the securities and therefore the trading prices of the securities.

We and/or our affiliates may presently or from time to time engage in business with the Vanguard Real Estate ETF. In the course of such business, we and/or our affiliates may acquire non-public information with respect to the Vanguard Real Estate ETF, and neither we nor any of our affiliates undertakes to disclose any such information to you. In addition, one or more of our affiliates may publish research reports with respect to the Vanguard Real Estate ETF. The statements in the preceding two sentences are not intended to affect the rights of investors in the securities under the securities laws.

Prior to February 1, 2018, the Vanguard Real Estate ETF tracked the MSCI US REIT Index. The MSCI US REIT Index aims to represent the performance of the equity REIT investment universe in the United States. The MSCI US REIT Index consists of REIT securities and covers approximately 85% of the U.S. REIT universe. The MSCI US Investable Market Real Estate 25/50 Index is designed to measure the performance of the large-, mid- and small-cap segments of the real estate sector of the U.S. equities market, as classified under the Global Industry Classification Standard (GICS). The GICS real estate sector is composed of equity real estate investment trusts (known as REITs), which includes specialized REITs, and real estate management and development companies. In early February 2018, the Vanguard Real Estate ETF ceased tracking the MSCI U.S. REIT Index and began tracking the MSCI US Investable Market Real Estate 25/50 Transition Index on an interim basis. The MSCI US Investable Market Real Estate 25/50 Transition Index was an interim index that gradually increased exposure to other real estate-related investments while proportionately reducing exposure to other stocks based on their weightings in the MSCI US Investable Market Real Estate 25/50 Index. In late July 2018, the Vanguard Real Estate ETF began tracking the MSCI US Investable Market Real Estate 25/50 Index. For more information about the MSCI US Investable Market Real Estate 25/50 Index." in this section.

In addition to investing in the securities that make up its underlying index, the Vanguard Real Estate ETF may also invest a portion of its assets in the Vanguard® Real Estate II Index Fund. The Vanguard® Real Estate II Index Fund is a wholly owned subsidiary of the Vanguard® Real Estate ETF and has the same investment strategy as the Vanguard® Real Estate ETF. The performance of the Vanguard® Real Estate II Index Fund will reflect fees and expenses separate from and in addition to those of the Vanguard® Real Estate ETF itself. These separate fees and expenses may reduce the Vanguard® Real Estate ETF's performance and may further increase the tracking error of the Vanguard® Real Estate ETF.

The MSCI US Investable Market Real Estate 25/50 Index

We obtained all information contained in this pricing supplement regarding the MSCI US Investable Market Real Estate 25/50 Index including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. That information reflects the policies of, and is subject to change by, MSCI, Inc., the index sponsor ("MSCI"). MSCI has no obligation to continue to publish, and may discontinue publication of, the MSCI US Investable Market Real Estate 25/50 Index at any time. Neither we nor the agent has independently verified the accuracy or completeness of any information with respect to the MSCI US Investable Market Real Estate 25/50 Index in connection with the offer and sale of the securities.

The MSCI US Investable Market Real Estate 25/50 Index and its parent index, MSCI USA Investable Market Real Estate Index, are both designed to measure the performance of the large-, mid- and small-cap segments of the real estate sector of the U.S. equities market. All securities in the MSCI US Investable Market Real Estate 25/50 Index and its parent index are classified in the Real Estate sector as per the Global Industry Classification Standard ("GICS®"). However, unlike its parent index, the MSCI US Investable Market Real Estate 25/50 Index applies certain investment limits that are imposed on regulated investment companies ("RICs") under the current U.S. Internal Revenue Code. The MSCI US Investable Market Real Estate 25/50 Index is an index created by applying the weight constraints described below to its parent index.

Objectives and Guiding Principles

Under current regulations, a fund needs to satisfy certain tests, such as those relating to asset diversification and sources of income, for qualification as a registered investment company ("RIC"). More specifically, one requirement of a RIC is that, at the end of each quarter of a RIC's tax year, no more than 25% of the value of the RIC's assets may be invested in a single issuer and the sum of the weights of all issuers representing more than 5% of the fund should not exceed 50% of the fund's total assets. The MSCI US Investable Market Real Estate 25/50 Index takes into account these investment limits, offering a benchmarking alternative for RIC-compliant funds.

The following principles have guided MSCI in designing a methodology for constructing the MSCI US Investable Market Real Estate 25/50 Index from underlying non-constrained indices.

Reflecting the 25% and 50% concentration constraints. Reflecting the 25% and 50% concentration constraints is the primary consideration in terms of both index construction and index maintenance. Ensuring timely and on-going reflection of the constraints requires the MSCI US Investable Market Real Estate 25/50 Index to be rebalanced periodically. The MSCI US Investable Market Real Estate 25/50 Index is rebalanced in February, May, August and November.

Minimizing tracking error to the parent index. Minimizing the tracking error between the MSCI US Investable Market Real Estate 25/50 Index and the parent index, while keeping the index turnover to a reasonable level, is another important objective. MSCI seeks to achieve this by rebalancing the MSCI US Investable Market Real Estate 25/50 Index using an optimization process that aims to minimize the constituent weight differences between the MSCI US Investable Market Real Estate 25/50 Index and the parent index.

Index Construction and Maintenance Methodology

Constructing and Rebalancing the MSCI U.S. Investable Market Real Estate 25/50 Index

The MSCI US Investable Market Real Estate 25/50 Index methodology follows a portfolio optimization framework. The Barra Optimizer is utilized to perform the optimization function, which is aimed at minimizing index turnover, tracking error and extreme deviation from the parent index. The Barra Optimizer is an algorithm designed to facilitate the portfolio construction process.

Constraint targets. The MSCI US Investable Market Real Estate 25/50 Index is subject to the following constraints:

• no issuer may exceed 25% of index weight; and

• all issuers with weight above 5% may not exceed 50% of the index weight.

Minimizing weight distance from the parent index. The MSCI US Investable Market Real Estate 25/50 Index methodology aims at minimizing the weight distance from the parent index. The active risk or the tracking error of the MSCI US Investable Market Real Estate 25/50 Index versus the parent index is measured as the distance between the constituent weights of the MSCI US Investable Market Real Estate 25/50 Index and the parent index.

Minimizing transaction cost. A transaction cost is applied as a proxy for index turnover on rebalancing from the MSCI US Investable Market Real Estate 25/50 Index.

Minimum weight of constituents. The minimum weight of any MSCI US Investable Market Real Estate 25/50 Index constituent is equal to the weight of the smallest constituent in the parent index.

Buffer Rules. A buffer of 10% of the value of each constraint is used in order to reduce the risk of non-compliance due to short term market movements between two quarterly rebalancing. As a result, at the point of constructing or rebalancing the MSCI US Investable Market Real Estate 25/50 Index, the weight of any single issuer cannot exceed 22.5% of the index weight and all issuers with weight above 4.5% cannot exceed 45% of the index weight.

Maintenance Rules

Quarterly index reviews. The MSCI US Investable Market Real Estate 25/50 Index is rebalanced quarterly and the changes resulting from the rebalancing are made as of the close of the last business day of each February, May, August and November, to coincide with the quarterly index reviews of the parent index.

The MSCI US Investable Market Real Estate 25/50 Index is in general rebalanced five business days before the effective date. The changes resulting from the rebalancing are announced on the same day.

In case a pro forma MSCI US Investable Market Real Estate 25/50 Index violates the 25/50 constraints between the announcement date and the effective date, the previously announced results will be discarded and a newly rebalanced MSCI US Investable Market Real Estate 25/50 Index will be announced.

There is no index rebalancing due to non-compliance between quarterly index reviews.

At each rebalancing, a constraint factor is calculated for each constituent of the MSCI US Investable Market Real Estate 25/50 Index. The constraint factor is defined as the weight in the MSCI US Investable Market Real Estate 25/50 Index at the time of the rebalancing divided by the weight in the parent index. The constraint factor as well as the constituents of the MSCI US Investable Market Real Estate 25/50 Index remains constant between index reviews except in case of corporate events.

Ongoing Event Related Changes. A security added to the parent index following a corporate event is added to the MSCI US Investable Market Real Estate 25/50 Index with an estimated capped weight, without rebalancing of the MSCI US Investable Market Real Estate 25/50 Index.

In the event of a merger or an acquisition where an index constituent acquires another index constituent or merges with another index constituent, the remaining company is maintained in the MSCI US Investable Market Real Estate 25/50 Index with a constraint factor calculated as the weighted average of the constraint factors before the corporate event.

If a spun-off security of an index constituent is added to the parent index, it will be added to the MSCI US Investable Market Real Estate 25/50 Index with the same constraint factor as the parent security.

The deletion of a constituent from the parent index following a corporate event triggers its deletion from the MSCI US Investable Market Real Estate 25/50 Index without rebalancing of the MSCI US Investable Market Real Estate 25/50 Index.

The addition of a newly eligible security in the parent index — for example, an early inclusion of a large initial public offering, or a security migrating to that parent index from another size segment — will result in the inclusion of that security in the MSCI US Investable Market Real Estate 25/50 Index and consequently trigger the full rebalancing of the MSCI US Investable Market Real Estate 25/50 Index.

Issuer Concentration Issues

A minimum of 15 issuers in the parent index is required at any point in time for the MSCI US Investable Market Real Estate 25/50 Index to be rebalanced as described above. In the event the number of issuers drops below 15 but remains above 11 following a corporate event or a regular index review, MSCI will apply the following adjustments:

- Number of issuers drops to 14: the buffer mentioned above will be reduced from 10% to 9%. Thus, the weight of any single issuer cannot exceed 22.75% of the index weight and all issuers with weight above 4.55% cannot exceed 45.5% of the index weight.
- Number of issuers drops to 13: the buffer mentioned above will be reduced from 10% to 4%. Thus, the weight of any single issuer cannot exceed 24% of the index weight and all issuers with weight above 4.8% cannot exceed 48% of the index weight.

• Number of issuers drops to 12: the buffer mentioned above will be reduced from 10% to 0%. Thus, the weight of any single issuer cannot exceed 25% of the index weight and all issuers with weight above 5% cannot exceed 50% of the index weight.

The MSCI US Investable Market Real Estate 25/50 Index will need to be discontinued if the number of issuers drops below 12 as mathematically no solution can satisfy the 25% and 50% constraints. MSCI will however temporarily maintain the MSCI US Investable Market Real Estate 25/50 Index for a minimum of two months before discontinuation by adding the necessary number of securities to the MSCI US Investable Market Real Estate 25/50 Index. The index discontinuation will coincide with one of the subsequent regular index reviews. The securities to be added will be chosen in the following order of priority:

- Securities deleted from the MSCI US Investable Market Real Estate 25/50 Index, provided they exhibit required liquidity and were not
 deleted due to financial difficulties, etc.
- Eligible securities of relevant size not included in the parent index, e.g., largest small cap size-segment securities.

In the event that no securities are eligible for temporary addition to the MSCI US Investable Market Real Estate 25/50 Index, MSCI will provide an index, as close as possible to the 25/50 constraints, for a minimum of two months before discontinuation. The index discontinuation will coincide with one of the subsequent regular index reviews.

Historical Performance of VNQ

The following graph sets forth the daily closing prices of VNQ from June 20, 2016 through June 18, 2021. We obtained VNQ closing prices below from Bloomberg, L.P. We make no representation or warranty as to the accuracy or completeness of the information obtained from Bloomberg, L.P. The historical prices of VNQ are provided for informational purposes only. You should not take the historical prices of VNQ as an indication of future performance, which may be better or worse than the prices set forth below. The closing price of VNQ on June 18, 2021 was \$[101.79].

