

Morgan Stanley Bank

Market-Linked Certificates of Deposit

Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027

The Market-Linked Certificates of Deposit (the “CDs”) are time deposit obligations of Morgan Stanley Bank, N.A. (“MSBNA”) that pay no interest and pay at maturity a cash payment of \$1,000 for each CD, insured by the Federal Deposit Insurance Corporation (the “FDIC”) up to the applicable limits, *plus* a supplemental amount (as defined below), if any. The supplemental amount is based on the performance of the Morgan Stanley MAP Trend Index (the “index”) as measured from the pricing date to and including the final observation date. If the final index value is *greater than* the initial index value, the supplemental amount will equal the *product* of \$1,000 *times* the participation rate *times* the index return. If the final index value is *less than or equal to* the initial index value, the supplemental amount will be zero and you will receive only the deposit amount of your CDs at maturity.

The index was established by Morgan Stanley on March 7, 2017 and employs a rules-based quantitative strategy (the “Index Methodology”) that combines a risk-weighted approach to portfolio construction with a momentum-based, or trend-following, asset allocation methodology to construct a notional portfolio. In addition, the strategy imposes an overall volatility-targeting feature upon the resulting portfolio. The goal of the index is to seek positive return opportunities in different market environments based upon recent trends in the underlying assets. The investment assumption underlying the allocation strategy is two-fold: that historical volatility of the underlying assets can be used to risk-weight a portfolio, and that past trends are likely to continue to be a good indicator of the future performance of that portfolio.

The components of the index consist of (i) 20 U.S.-listed exchange traded funds (“ETFs”), representing U.S. and non-U.S. equities, fixed income securities, commodities and real estate, and (ii) the Morgan Stanley Two Year Treasury Index (collectively, the “Index Components”). The notional portfolio constructed by the Index Methodology of Index Components is referred to as the “Asset Portfolio.” The Asset Portfolio will consist of long-only positions in each Index Component, and each Index Component except for the Morgan Stanley Two Year Treasury Index is subject to a maximum exposure cap. The targeted volatility for the index is 5% (the “Volatility Target”).

The index is rebalanced each Strategy Business Day (the “Daily Rebalancing”). Upon each Daily Rebalancing for the index, the Index Methodology uses the pre-assigned Risk Budget assigned to each ETF (as set forth under “Annex A – Morgan Stanley MAP Trend Index – Index Components”) and the volatility for each ETF to make initial base allocations. The Index Methodology then calculates a signal based on the upward or downward trend of each ETF (the “Trend Signal”). The index calculates each Trend Signal by observing two moving averages, one short-term and one long-term, over different look-back periods for each respective ETF. A Trend Signal that converges toward one indicates an upward trend and a Trend Signal that converges toward zero indicates a downward trend. Once the Trend Signal is calculated for each ETF, the previously determined base allocations are scaled by the Trend Signal by allocating more upward-trending securities to the Asset Portfolio. The magnitude of each position taken by the index following the Trend Signal adjustment is then scaled to the Volatility Target based on a pro-rata volatility-scaling that seeks to achieve a balanced level of volatility in the index’s exposure to each of the ETFs.

The index is calculated on an excess return basis, and therefore the level reflects the weighted return of the Asset Portfolio reduced by the return on an equivalent cash investment receiving the Secured Overnight Financing Rate (“SOFR”) *plus* 0.26%. The index performance is further reduced by a servicing cost of 0.85% per annum calculated on a daily basis. For more information, see “Annex A – Morgan Stanley MAP Trend Index” beginning on page 28 and the “Risk Factors” beginning on page 8.

These long-dated CDs are designed for investors who are concerned about principal risk but seek a multiple asset-linked return provided by the Morgan Stanley MAP Trend Index, and who are willing to forgo interest and dividend payments in exchange for the repayment of the deposit amount at maturity insured by the FDIC up to the applicable limits plus the potential to receive the supplemental amount based on the performance of the index.

The CDs are insured only within the limits and to the extent described in this disclosure supplement and in the accompanying disclosure statement. See “Risk Factors”—The deposit amount of any CDs owned in excess of the limit on FDIC insurance is not insured by the FDIC” in this disclosure supplement. Any payment on the CDs in excess of FDIC insurance limits is subject to the credit risk of MSBNA.

SUMMARY TERMS

Issuer:	Morgan Stanley Bank, N.A. (“us,” “we” or “MSBNA”)
Aggregate amount deposited:	\$
Deposit amount:	\$1,000 per CD
Pricing date:	December 27, 2022
Original issue date (settlement date):	December 30, 2022 (3 business days after the pricing date)
Maturity date:	December 30, 2027, subject to postponement in the event of a market disruption event
Interest:	There are no regular payments of interest on the CDs.
Index:	Morgan Stanley MAP Trend Index
Payment at maturity:	A cash payment of \$1,000 for each \$1,000 CD <i>plus</i> the supplemental amount, if any
Supplemental amount:	The supplemental amount payable at maturity per \$1,000 CD will equal: <ul style="list-style-type: none"> • if the index return is <i>positive</i> (the final index value is <i>greater than</i> the initial index value), the <i>product</i> of (a) \$1,000, (b) the index return and (c) the participation rate, or • if the index return is <i>zero or negative</i> (the final index value is <i>less than or equal to</i> the initial index value), \$0.
Index return:	(final index value – initial index value) / initial index value
Participation rate:	300% to 315%. The actual participation rate will be determined on the pricing date.
Maximum supplemental amount:	None

Terms continued on the following page

CUSIP / ISIN:	61773TJA2 / US61773TJA25
Estimated value on the pricing date:	Approximately \$890.50 per CD, or within \$40.50 of that estimate. See “Investment Summary” beginning on page 3.
Distribution arrangements:	Under the arrangements established by the brokers with MSBNA, each broker will receive a fee of \$ per \$1,000 CD, or % of the deposit amount of the CDs, which includes compensation paid to other brokers. An affiliate of MSBNA may also receive fees from MSBNA in respect of hedging arrangements entered into with respect to the CDs.

Investing in the CDs involves risks. See “Risk Factors” beginning on page 8 in this disclosure supplement.

The CDs offered hereby are time deposit obligations of MSBNA, a national bank chartered by the Office of the Comptroller of the Currency, the deposits of which are insured by the Federal Deposit Insurance Corporation within the limits and only to the extent described in the disclosure statement under the section entitled “Deposit Insurance.” In addition, unless and until (i) the supplemental amount has been calculated and (ii) MSBNA has become obligated to pay the supplemental amount, if any, the FDIC likely would take the position that the supplemental amount is neither insured nor represents a valid claim against the FDIC as conservator or receiver. The FDIC has also taken the position that any secondary market premium paid by a depositor above the deposit amount of the CDs would not be insured or recognized by the FDIC. For more information on deposit insurance, see the accompanying disclosure statement under the heading “Deposit Insurance.”

The CDs offered hereby are obligations of MSBNA only and are not obligations of your brokers or of Morgan Stanley or any other affiliate of MSBNA. Broker-dealers may use this disclosure supplement and the accompanying disclosure statement in connection with offers and sales of the CDs after the date hereof. References in this disclosure supplement to MSBNA may include affiliates of MSBNA that provide services to MSBNA related to the CDs pursuant to service-level agreements.

Disclosure Statement Dated April 30, 2020

Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027

Terms continued from previous page:

Initial index value:	, which is the index closing value on the pricing date
Final index value:	The index closing value on the final observation date
Final observation date:	December 27, 2027, subject to postponement for non-index business days and certain market disruption events
Minimum deposit size:	\$1,000 and increments of \$1,000 in excess thereof.
Call option:	The CDs will not be callable by MSBNA prior to the stated maturity date.
Limited early withdrawals:	At par, only upon death or adjudication of incompetence of a beneficial holder of the CDs.
Calculation agent:	Morgan Stanley & Co. LLC ("MS & Co.")

Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027

Investment Summary

Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027

The following summary describes the CDs we are offering to you in general terms only. You should read the summary together with the more-detailed information contained in the rest of this disclosure supplement and the accompanying disclosure statement. By purchasing the CDs, you acknowledge that you have received a copy of this disclosure supplement and the accompanying disclosure statement. You should carefully consider, among other things, the matters set forth in "Risk Factors" in this disclosure supplement, as the CDs involve risks not associated with conventional certificates of deposit.

The Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027 offer 300% to 315% participation in any positive performance of the index. The actual participation rate will be determined on the pricing date.

The CDs are time deposit obligations of MSBNA. At maturity of the CDs, you will receive a payment in cash equal to the \$1,000 deposit amount of each CD plus a supplemental amount, if any. The supplemental amount is based on the performance of the index as measured from the pricing date to and including the final observation date. If the final index value is *greater than* the initial index value, the supplemental amount will equal the product of \$1,000 *times* the participation rate *times* the index return. If the final index value is *less than or equal to* the initial index value, the supplemental amount will be zero and you will receive only the deposit amount of your CDs at maturity. Therefore, you will receive at least the deposit amount of your CDs if you hold the CDs to maturity, regardless of the performance of the index to which the CDs are linked, subject to our creditworthiness with respect to any amount in excess of applicable FDIC insurance limits.

The CDs provide investors 300% to 315% participation in any appreciation of the index over the term of the CDs, but provide no exposure to any decline of the index if the CDs are held to maturity. The actual participation rate will be determined on the pricing date.

The CDs are insured only within the limits and to the extent described in this disclosure supplement and in the accompanying disclosure statement. See "Risk Factors—The deposit amount of any CDs owned in excess of the limit on FDIC insurance is not insured by the FDIC" in this disclosure supplement. Any payment on the CDs in excess of FDIC insurance limits is subject to the credit risk of MSBNA.

Investing in the CDs is not equivalent to investing in a conventional certificate of deposit or directly in the Morgan Stanley MAP Trend Index or any of the components included in the Morgan Stanley MAP Trend Index.

Maturity:	5 years
Participation rate:	300% to 315%. The actual participation rate will be determined on the pricing date.
Maximum supplemental amount:	None
Interest:	There are no regular payments of interest on the CDs.

Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027

Morgan Stanley MAP Trend Index

The Morgan Stanley MAP Trend Index has been developed by and is calculated, published and maintained by Morgan Stanley & Co. LLC. MAP stands for “Multi-Asset Portfolio.” The index employs a rules-based quantitative strategy that combines a risk-weighted approach to portfolio construction with a momentum-based, or trend-following, asset allocation methodology to construct a notional portfolio. In addition, the strategy imposes an overall volatility-targeting feature upon the resulting portfolio. The goal of the index is to maximize returns for a given level of risk based upon recent trends in the underlying assets. The investment assumption underlying the allocation strategy is two-fold: that historical volatility of the underlying assets can be used to risk-weight a portfolio, and that past trends are likely to continue to be a good indicator of the future performance of that portfolio.

The components of the index consist of (i) 20 U.S.-listed exchange traded funds (“ETFs”), representing U.S. and non-U.S. equities, fixed income securities, commodities and real estate, and (ii) the Morgan Stanley Two Year Treasury Index. The notional portfolio constructed by the Index Methodology of Index Components is referred to as the Asset Portfolio. The Asset Portfolio will consist of long-only positions in each Index Component, and each Index Component except for the Morgan Stanley Two Year Treasury Index is subject to a maximum exposure cap. The targeted volatility for the Index is 5%.

The index is calculated on an excess return basis, and therefore the level is determined by the weighted return of the Asset Portfolio reduced by the return on an equivalent cash investment receiving SOFR plus 0.26%. The Index performance is further reduced by a servicing cost of 0.85% per annum calculated on a daily basis.

The index is rebalanced each Strategy Business Day. Upon each Daily Rebalancing for the index, the Index Methodology uses the pre-assigned Risk Budget assigned to each ETF and the volatility for each ETF to make initial base allocations. The Index Methodology then calculates a signal based on the upward or downward trend of each ETF. The index calculates each Trend Signal by observing two moving averages, one short-term and one long-term, over different look-back periods for each respective ETF. A Trend Signal that converges toward one indicates an upward trend and a Trend Signal that converges toward zero indicates a downward trend. Once the Trend Signal is calculated for each ETF, the previously determined base allocations are scaled by the Trend Signal by allocating more upward-trending securities to the Asset Portfolio. The magnitude of each position taken by the index following the Trend Signal adjustment is then scaled to the Volatility Target based on a pro-rata volatility-scaling that seeks to achieve a balanced level of volatility in the index’s exposure to each of the ETFs. Once the composition of the Asset Portfolio is determined, the index value is equivalent to the sum of each Index Component’s market price less the excess return cost of SOFR *plus* 0.26% and the servicing cost of 0.85% per annum.

Please see “Annex A—Morgan Stanley MAP Trend Index” beginning on page 28 for more information about the index. In addition, a CD linked to the index involves risks. Please see “Risk Factors” beginning on page 8.

Market-Linked Certificates of Deposit Linked to the Morgan Stanley MAP Trend Index due December 30, 2027

The deposit amount of each CD is \$1,000. This price includes costs associated with issuing, selling, structuring and hedging the CDs, which are borne by you, and, consequently, the estimated value of the CDs on the pricing date will be less than \$1,000. MSBNA estimates that the value of each CD on the pricing date will be approximately \$890.50, or within \$40.50 of that estimate. MSBNA's estimate of the value of the CDs as determined on the pricing date will be set forth in the final disclosure supplement.

What goes into the estimated value on the pricing date?

In valuing the CDs on the pricing date, MSBNA takes into account that the CDs comprise both a debt component and a performance-based component linked to the index. The estimated value of the CDs is determined using MSBNA's own pricing and valuation models, market inputs and assumptions relating to the index, instruments based on the index, volatility and other factors including current and expected interest rates, as well as MSBNA's estimated secondary market rate, which is described below.

What determines the economic terms of the CDs?

In determining the economic terms of the CDs, including the participation rate, MSBNA uses an internal funding rate, which is likely to be lower than MSBNA's estimated secondary market rate and therefore advantageous to MSBNA. If the issuing, selling, structuring and hedging costs borne by you were lower or if the internal funding rate were higher, one or more of the economic terms of the CDs would be more favorable to you.

What is MSBNA's estimated secondary market rate?

The estimated value of the debt component is based on a reference interest rate that is MSBNA's good faith estimate of the implied interest rate at which its debt securities of the same maturity would trade in the secondary market, as determined as of a recent date. While the CDs are not debt securities, MSBNA uses this estimated secondary market rate for debt securities for purposes of determining the estimated value of the CDs since MSBNA expects secondary market prices, if any, for the CDs that are provided by brokers to generally reflect such rate, and not the rate at which brokered CDs issued by MSBNA may trade. MSBNA determines the estimated value of the CDs based on this estimated secondary market rate, rather than the internal funding rate that it uses to determine the economic terms of the CDs, for the same reason. As MSBNA is principally a deposit-taking institution, secondary market activities in its debt securities are limited, and, accordingly, MSBNA determines this estimated secondary market rate based on a number of factors that involve the good faith discretionary judgment of MSBNA, as well as a limited number of market-observable inputs. Because MSBNA does not continuously calculate its reference interest rate, the reference interest rate used in the calculation of the estimated value of the debt component may be higher or lower than MSBNA's estimated secondary market rate at the time of that calculation.

What is the relationship between the estimated value on the pricing date and the secondary market price of the CDs?

The price at which MS & Co. or any other broker purchases the CDs in the secondary market, absent changes in market conditions, including those related to the index, may vary from, and be lower than, the estimated value on the pricing date, because the secondary market price takes into account the bid-offer spread that MS & Co. or any other broker would charge in a secondary market transaction of this type and other factors. However, because the costs associated with issuing, selling, structuring and hedging the CDs are not fully deducted upon issuance, for a period of up to 6 months following the original issue date, to the extent that MS & Co. or any other broker may buy or sell the CDs in the secondary market, absent changes in market conditions, including those related to the index, and to MSBNA's estimated secondary market rates, it would do so based on values higher than the estimated value. MSBNA expects that those higher values will also be reflected in your brokerage account statements.

MS & Co. or any other broker may, but is not obligated to, make a market in the CDs, and, if it once chooses to make a market, may cease doing so at any time.

FDIC Insurance

The CDs are time deposit obligations of MSBNA and are insured by the FDIC up to applicable limits set by federal law and regulation. In general, the deposit amount of the CDs is protected by federal deposit insurance and backed by the U.S.

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government to a maximum amount of \$250,000 for all deposits held by you in the same ownership capacity with MSBNA as described in the disclosure statement under "Deposit Insurance." The deposit amount of any CDs owned in excess of these limits is not insured by the FDIC. **Each holder is responsible for monitoring the total amount of its deposits with MSBNA in order to determine the extent of deposit insurance coverage available to it on such deposits, including the CDs and the deposits swept to MSBNA from brokerage accounts held at our affiliate.** Claims of depositors are entitled to a preference in right of payment over claims of general unsecured creditors in the event of a liquidation or other resolution of any FDIC-insured depository institution. However, there can be no assurance that a depositor would receive the entire uninsured deposit amount of CDs in any such liquidation or other resolution. In addition, unless and until (i) the supplemental amount has been calculated and (ii) MSBNA has become obligated to pay the supplemental amount, if any, the FDIC likely would take the position that the supplemental amount is neither insured nor represents a valid claim against the FDIC as conservator or receiver. Accordingly, any supplemental amount likely would be neither insured nor recognized by the FDIC prior to its calculation on the final observation date.

Holding CDs in Individual Retirement Account

The CDs may be held in an individual retirement account. See "Deposit Insurance" in the accompanying disclosure statement for more detailed information.

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Hypothetical Payout on the CDs

The table below illustrates the payment at maturity (including the payment of any supplemental amount) for a \$1,000 CD for a hypothetical range of index returns. It does not cover the complete range of possible payouts at maturity. The table assumes an initial index value of 200 and assumes a hypothetical participation rate of 300%. The actual participation rate and initial index value will be determined on the pricing date. The numbers appearing in the table below may have been rounded for ease of analysis.

Index return	Final index value	Stated deposit amount	Supplemental amount	Payment at maturity	Return on \$1,000 CD	Annual percentage yield
70.00%	340	\$1,000	\$2,100.00	\$3,100.00	210.00%	25.39%
60.00%	320	\$1,000	\$1,800.00	\$2,800.00	180.00%	22.87%
50.00%	300	\$1,000	\$1,500.00	\$2,500.00	150.00%	20.11%
40.00%	280	\$1,000	\$1,200.00	\$2,200.00	120.00%	17.08%
30.00%	260	\$1,000	\$900.00	\$1,900.00	90.00%	13.70%
20.00%	240	\$1,000	\$600.00	\$1,600.00	60.00%	9.86%
10.00%	220	\$1,000	\$300.00	\$1,300.00	30.00%	5.39%
0.00%	200	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-10.00%	180	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-20.00%	160	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-30.00%	140	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-40.00%	120	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-50.00%	100	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-60.00%	80	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%
-70.00%	60	\$1,000	\$0.00	\$1,000.00	0.00%	0.00%

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Risk Factors

The following is a non-exhaustive list of certain key risk factors for investors in the CDs. We urge you to consult with your investment, legal, tax, accounting and other advisers in connection with your investment in the CDs.

- **The CDs differ from conventional bank deposits.** The CDs combine multiple-asset market exposure and features of traditional certificates of deposit. The terms of the CDs differ from those of conventional bank deposits in that we will not pay regular interest, and the return on your investment in the CDs may be less than the amount that would be paid on an ordinary bank deposit. The return at maturity of only the deposit amount of each CD will not compensate you for any loss in value due to inflation and other factors relating to the value of money over time. The CDs have been designed for investors who are concerned about principal risk but seek exposure to the index, and who are willing to forgo interest and dividend payments in exchange for the repayment of the deposit amount at maturity insured by the FDIC up to the applicable limits, plus the potential to receive the supplemental amount. You will receive at least the deposit amount of your CDs if you hold the CDs to maturity, regardless of the performance of the index to which the CDs are linked, subject to our creditworthiness with respect to any amount in excess of applicable FDIC insurance limits.
- **The deposit amount of any CDs owned in excess of the limit on FDIC insurance is not insured by the FDIC.** The CDs are deposit obligations of MSBNA and are insured by the FDIC up to applicable limits set by federal law and regulation, currently \$250,000 for all deposits held by you in the same ownership capacity at MSBNA, as described in the disclosure statement under "Deposit Insurance." The deposit amount of any CDs owned in excess of this limit would not be insured or recognized by the FDIC. Under federal legislation adopted in 1993, claims of depositors are entitled to a preference in right of payment over claims of general unsecured creditors in the event of a liquidation or other resolution of any FDIC-insured depository institution. However, there can be no assurance that a depositor would receive the entire uninsured amount of the CDs in any such liquidation or other resolution. Additionally, because the supplemental amount is calculated using the final index value on the final observation date, any potential supplemental amount likely would not be eligible for federal deposit insurance prior to the final observation date and is subject to the credit risk of MSBNA.
- **The CDs are designed to be held to maturity.** The CDs are not designed to be short-term trading instruments. If you are able to sell your CDs prior to maturity, the price at which you may be able to sell your CDs is likely to be at a substantial discount from the deposit amount of the CDs, even in cases where the index has appreciated since the date of the issuance of the CDs. The hypothetical examples described in this disclosure supplement assume that your CDs are held to maturity. The return of the deposit amount applies only at maturity. Accordingly, you should be willing and able to hold the CDs to maturity.
- **No right to withdraw your funds prior to the stated maturity date of the CDs except upon your death or adjudication of incompetence.** By your purchase of a CD, you are deemed to represent to us that your deposits with us, including the CDs, when aggregated in accordance with FDIC regulations are within the \$250,000 FDIC insurance limit for each ownership capacity. For purposes of early withdrawal upon your death or adjudication of incompetence, we will limit the combined aggregate deposit amount of (i) these CDs and (ii) any other CDs of ours subject to this withdrawal limit to the FDIC insurance coverage amount applicable to each ownership capacity in which such CDs are held. All issues regarding eligibility for early withdrawal will be determined by us in our sole discretion. Due to the restrictions on early withdrawals, you should not expect us to allow you to have access to your funds prior to the stated maturity date of the CDs.
- **The CDs could be repudiated or transferred to another institution if the FDIC were to be appointed as conservator or receiver of MSBNA.** If the FDIC were appointed as conservator or receiver of MSBNA, the FDIC would be authorized to disaffirm or repudiate any contract to which MSBNA is a party, the performance of which was determined to be burdensome, and the disaffirmance or repudiation of which was determined to promote the orderly administration of MSBNA's affairs. It is likely that for this purpose, deposit obligations, such as the CDs, would be considered "contracts" within the meaning of the foregoing and that the CDs could be repudiated by the FDIC as

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conservator or receiver of MSBNA. Such repudiation should result in a claim by a depositor against the conservator or receiver for the deposit amount of the CDs and any accrued interest. No claim would be available, however, for any secondary market premium paid by a depositor above the deposit amount of a CD and no claims likely would be available for any supplemental amount if MSBNA failed prior to the applicable final observation date. The FDIC as conservator or receiver may also transfer to another insured depository institution any of the insolvent institution's assets and liabilities, including liabilities such as the CDs, without the approval or consent of the beneficial owners of the CDs. The transferee depository institution would be permitted to offer beneficial owners of the CDs the choice of (i) repayment of the deposit amount of the CDs or (ii) substitute terms which may be less favorable. If a CD is paid off prior to its stated maturity date, either by a transferee depository institution or the FDIC, its beneficial owner may not be able to reinvest the funds at the same rate of return as the rate on the original CD.

- **The CDs may not pay more than the deposit amount at maturity.** You may receive a lower payment at maturity than you would have received if you had invested directly in the index, the components of the index or contracts relating to the index for which there is an active secondary market. If the index return is zero or negative, you will receive a payment at maturity of only \$1,000 per \$1,000 CD.
- **The amount payable on the CDs is not linked to the value of the index at any time other than the final observation date.** The final index value will be based on the index closing value on the final observation date, subject to postponement for non-index business days and certain market disruption events. Even if the value of the index appreciates prior to the final observation date but then drops by the final observation date, the payment at maturity will be less, and may be significantly less, than it would have been had the payment at maturity been linked to the value of the index prior to such drop. Although the actual value of the index on the stated maturity date or at other times during the term of the CDs may be higher than the final index value, the payment at maturity will be based solely on the index closing value on the final observation date.
- **The market price of the CDs will be influenced by many unpredictable factors.** Several factors, many of which are beyond our control, will influence the value of the CDs and the price, if any, at which your broker may be willing to purchase or sell the CDs, including the value of the index at any time, the volatility (frequency and magnitude of changes in value) of the index, dividend rate on the stocks underlying the index, interest and yield rates in the market, actual or anticipated changes in the level of SOFR, the time remaining until the CDs mature, geopolitical conditions and economic, financial, political, regulatory or judicial events that affect the index or equities markets generally and which may affect the final index value of the index and any actual or anticipated changes in our credit ratings or credit spreads. Generally, the longer the time remaining to maturity, the more the market price of the CDs will be affected by the other factors described above. The level of the index may be, and has recently been, volatile, and we can give you no assurance that the volatility will lessen. See "Hypothetical Retrospective and Historical Information" below. You may receive less, and possibly significantly less, than the deposit amount per CD if you try to sell your CDs prior to maturity.
- **Investments in the CDs may be subject to the credit risk of MSBNA.** If you are a depositor at MSBNA and you purchase a deposit amount of the CDs, which, when aggregated with all other deposits held by you in the same ownership capacity at MSBNA, exceeds applicable FDIC insurance limits, you will be subject to the credit risk of MSBNA, and our credit ratings and credit spreads may adversely affect the market value of the CDs. You are dependent on MSBNA's ability to pay amounts due on the CDs in excess of applicable FDIC insurance limits at maturity or on any other relevant payment dates, and you are therefore subject to our credit risk and to changes in the market's view of our creditworthiness. Any decline in our credit ratings or increase in the credit spreads charged by the market for taking our credit risk may adversely affect the market value of the CDs.
- **The rate MSBNA is willing to pay for CDs of this type, maturity and issuance size is likely to be lower than MSBNA's estimated secondary market rates and advantageous to MSBNA. Both the lower rate and the inclusion of costs associated with issuing, selling, structuring and hedging the CDs in the deposit amount reduce the economic terms of the CDs, cause the estimated value of the CDs to be less than the deposit amount and will adversely affect secondary market prices.** Assuming no change in market conditions or any

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other relevant factors, the prices, if any, at which brokers, including MS & Co., may be willing to purchase the CDs in secondary market transactions will likely be significantly lower than the deposit amount, because secondary market prices will exclude the issuing, selling, structuring and hedging-related costs that are included in the deposit amount and borne by you and because the secondary market prices will reflect the bid-offer spread that any broker would charge in a secondary market transaction of this type as well as other factors.

The inclusion of the costs of issuing, selling, structuring and hedging the CDs in the deposit amount and the lower rate MSBNA is willing to pay as issuer make the economic terms of the CDs less favorable to you than they otherwise would be.

However, because the costs associated with issuing, selling, structuring and hedging the CDs are not fully deducted upon issuance, for a period of up to 6 months following the issue date, to the extent that MS & Co. or any other broker may buy or sell the CDs in the secondary market, absent changes in market conditions, including those related to the index, and to MSBNA's estimated secondary market rates, it would do so based on values higher than the estimated value, and MSBNA expects that those higher values will also be reflected in your brokerage account statements.

- **The estimated value of the CDs is determined by reference to MSBNA's pricing and valuation models, which may differ from those of other brokers and is not a maximum or minimum secondary market price.** These pricing and valuation models are proprietary and rely in part on subjective views of certain market inputs and certain assumptions about future events, which may prove to be incorrect. As a result, because there is no market-standard way to value these types of CDs, MSBNA's models may yield a higher estimated value of the CDs than those generated by others, including other brokers in the market, if they attempted to value the CDs. In addition, the estimated value on the pricing date does not represent a minimum or maximum price at which brokers, including MS & Co., would be willing to purchase your CDs in the secondary market (if any exists) at any time. The value of your CDs at any time after the date of this disclosure supplement will vary based on many factors that cannot be predicted with accuracy, including MSBNA's creditworthiness and changes in market conditions. See also "The market price of the CDs will be influenced by many unpredictable factors" above.
- **There are risks associated with the index.**
 - **The level of the index can go down as well as up.** There can be no assurance that the index will achieve positive returns. The index tracks the performance of a rules-based investment methodology that selects a hypothetical portfolio of Underlying Assets to track. The performance of the index will depend on the performance of that hypothetical portfolio *minus* the sum of an excess return cost of SOFR *plus* 0.26% and a servicing cost of 0.85% per annum. If the hypothetical portfolio declines in value, the index value will also decline. Even if the hypothetical portfolio increases in value, the index value will nevertheless decline if the increase in the value of the portfolio is not sufficient to overcome the deduction of the excess return cost of SOFR *plus* 0.26% and the servicing cost of 0.85% per annum. Accordingly, no assurance can be given that the index will be successful or outperform any alternative strategy that might be employed in respect of the Index Components.
 - **The base allocation of ETFs in the Asset Portfolio is determined in reference to each ETF's Risk Budget and volatility.** The base allocation of each ETF in the Asset Portfolio is determined in proportion to its pre-set Risk Budget. The Risk Budget was set by the Strategy Sponsor, does not change during the life of the index and there is no guarantee that the Risk Budget allocated to each ETF is the optimal allocation. A higher or lower Risk Budget could result in increased investment in an ETF that performs poorly or insufficient investment in an ETF that performs well over the life of the index. The base allocations of each ETF in the Asset Portfolio are then scaled relative to the other ETFs in the Asset Portfolio according to their volatility. The base allocation of each ETF can be higher or lower than its Risk Budget (However, after the entirety of the index calculation is complete, no ETF's exposure will exceed its maximum exposure cap.) Volatility calculations based on historical volatility presume that historical volatility is an accurate indication of current volatility. However, there is a time lag

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associated with the volatility calculation. There is no guarantee that the volatility in the preceding period is representative of the current volatility of the ETFs. Because the index calculates realized volatility over approximately a one-year period, it may be some period of time before a recent increase in the volatility of the ETFs is sufficiently reflected in the calculation of realized volatility to cause a compensating change to the base allocation in the Asset Portfolio. Moreover, there is no guarantee that the one year look-back period for volatility utilized by the index produces the most accurate measure of current volatility. Accordingly, no assurance can be given that each ETF's Risk Budget and calculated volatility will result in the optimal base allocation.

- **There are risks associated with the index's momentum investment strategy.** The index is constructed using what is generally known as a momentum-based investment strategy. Momentum-based investing generally seeks to capitalize on positive trends in the prices of assets. As such, the composition of the index is based on the historical performance of the ETFs over both long-term and short-term periods. However, there is no guarantee that trends existing in the preceding periods will continue in the future. A momentum-based strategy is different from a strategy that seeks long-term exposure to a notional portfolio consisting of constant components with fixed weights. The index may fail to realize gains that could occur as a result of holding assets that have experienced price declines, but after which experience a sudden price spike. As a result, if market conditions do not represent a continuation of prior observed trends, the level of the index, which is rebalanced based on prior trends, may decline. Additionally, even when the values of the ETFs tracked by the index are trending downwards, the index will continue to be composed of those ETFs until the next rebalancing. Furthermore, the equity and alternative asset classes of ETFs in the index seek to capitalize on potential counter-trends in the short term. This could potentially result in a failure to maximize return on an ETF in the equity or alternative asset classes that consistently trends upward over the life of the index. In this scenario, because the spot horizon is above the long-term horizon, it will never result in a Trend Signal of 1 because the short-term horizon value from 1 Strategy Business Day prior will consistently exceed the spot horizon value from 5 Strategy Business Days prior. This will result in substantially lower returns than if one were to hold an interest in the underlying ETF itself. Alternatively, this strategy could result in over-exposure to a steadily declining ETF. The Trend Signal in these asset classes will remain at 1 and the index will remain fully exposed to an ETF's decline until the ETF begins trending up and the short-term horizon exceeds the spot horizon or continues declining such that the spot horizon is below the long-term horizon. Even if the spot horizon falls below the long-term horizon, the index will not fully divest its position until the spot horizon of the ETF is down compared to both the long-term horizon and the short-term horizon. No assurance can be given that the investment strategy used to construct the index will outperform any alternative index that might be constructed from the Index Components.
- **Low volatility in the index is not synonymous with low risk in an investment linked to the index.** For example, even if the volatility of the index were to be in line with the Volatility Target, the index level may decrease over time, which may result in a zero return on the CDs.
- **While the index has a Volatility Target of 5%, there can be no guarantee, even if the Asset Portfolio is rebalanced daily, that the realized volatility of the index will not be less than or greater than 5%.** In fact, the historical volatility of the index, based on simulated returns, has generally been between 4% and 6%. Although the index aims to ensure that its realized volatility does not exceed 5%, there is no guarantee that it will successfully do so. There is a time lag associated with the index's volatility control adjustments. Because realized volatility is measured over either approximately the prior month or two months for purposes of the volatility control feature, it may be some period of time before a recent increase in the volatility of the index ETFs is sufficiently reflected in the calculation of realized volatility to cause a compensating reallocation in the Asset Portfolio. During the intervening period, if the increased volatility is associated with a significant decline in the value of the index ETFs, the index may in turn experience a significant decline without the reduction in exposure to the Index ETFs that the volatility control feature is intended to trigger. Moreover, the index ETFs during the earlier part of the relevant volatility period may be different than the current index ETFs, and if the earlier index

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ETFs were significantly less volatile than the current index ETFs, the index may be slow to adjust to significant volatility in the current index ETFs. Furthermore, the fact that the index applies a 5% volatility constraint in the selection of the Asset Portfolio is no assurance that the resulting selected portfolio will not experience volatility that is significantly greater than 5% in the future. An Asset Portfolio may experience greater volatility in the future because future market conditions may differ from past market conditions.

- **There can be no assurance that the actual volatility of the index will be lower than the volatility of any or all of the Index Components.** The index's exposure to each Index Component is adjusted through a volatility-scaling mechanism that seeks to target a volatility of 5% for the index. However, as the volatility-scaling mechanism looks to trends that have occurred in the past to then make adjustments to future positions, it is unlikely that the index will achieve the target volatility in any Index Component for any given period of time. The actual volatility achieved by the index overall, as well as the volatility achieved for each Index Component, will likely differ – perhaps significantly – from the Volatility Target.
- **The volatility target feature of the index may dampen its performance in bullish markets.** The index is designed to achieve a Volatility Target of 5% regardless of the direction of price movements in the market. Therefore, in bullish markets, if the realized volatility is higher than the Volatility Target, the adjustments to the Asset Portfolio of the index through Daily Rebalancing might dampen the performance of the index. The selection of the Index Components, as well as the Volatility Target feature, may cause the index to underperform one or more of the Index Components.
- **The value of the index and any instrument linked to the index may increase or decrease due to a number of factors, many of which are beyond our control.** The nature and weighting of the ETFs can vary significantly, and no assurance can be given as to the allocation of any ETF at any time.
- **The future performance of the index may bear little or no relation to the historical or hypothetical retrospective performance of the index.** Among other things, the trading prices of the ETFs and the dividends paid on the ETFs will impact the level and the volatility of the index. It is impossible to predict whether the level of the index will rise or fall. The fact that a given allocation among the Asset Portfolio performed well over any look-back period does not mean that such allocation will continue to perform well in the future. Future market conditions may differ from past market conditions, and the conditions that may have caused the favorable historical performance may no longer exist. Furthermore, by continually seeking to track the Asset Portfolio that would have been the best-performing portfolio (subject to constraints) over a look-back period, the index may perpetually be too late, and it may perpetually “buy high.” By the time the index hypothetically invests in a portfolio of ETFs, the ETFs in that portfolio may already have experienced significant appreciation. The index may therefore perpetually make hypothetical investments in portfolios when they are expensive, which may lead to poor returns.
- **The index is particularly susceptible to “choppy” markets.** Past performance is particularly likely to be a poor indicator of future performance in “choppy” markets, which are characterized by short-term volatility and the absence of consistent long-term performance trends. In such markets, strategies that use past performance as an indicator of future performance, such as that followed by the index, are subject to “whipsaws,” which occur when the market reverses and does the opposite of what is indicated by past performance. The index may experience significant declines in such markets.
- **The index has fixed weighting constraints.** The index applies limits to the weight that may be assigned to each ETF. These limits are fixed and may skew the allocations among the ETFs in a way that reduces the potential performance of the index. For example, because of the weighting constraints, the index may not allocate all of its exposure to the single ETF with the best performance over the prior six months, even if that ETF had a realized volatility of less than 5%. Instead, the weighting constraints require the index to spread its exposure over all the ETFs, even if one or more of those ETFs had unfavorable returns over the relevant look-

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back period. Additionally, the weighting constraints mean that the index must have some exposure to all of the ETFs at all times, even when there is no Asset Portfolio that would be expected to appreciate because all are in decline. The index will not take a “short” position in any Index Component, even if the relevant Index Component displays a negative performance over the relevant look-back period.

- **The index was established on March 7, 2017 and therefore has a very limited history.** The performances of the index and some of the component data have been retrospectively simulated for the period from January 1, 2004 to March 7, 2017. As such, performance for periods prior to the establishment of the index has been retrospectively simulated by Morgan Stanley & Co. LLC on a hypothetical basis. A retrospective simulation means that no actual investment which allowed a tracking of the performance of the index existed at any time during the period of the retrospective simulation. The methodology and the index used for the calculation and retrospective simulation of the index has been developed with the advantage of hindsight. In reality, it is not possible to invest with the advantage of hindsight and therefore this historical performance is purely theoretical and may not be indicative of future performance. In addition, the Morgan Stanley Two Year Treasury Index and certain ETFs included in the Index Components existed for only a portion of the period for which Morgan Stanley & Co. LLC has calculated hypothetical retrospective values. For any period during which data for the Morgan Stanley Two Year Treasury Index or one or more ETFs did not exist, the historical simulation is based on (i) the value of the Morgan Stanley Two Year Treasury Index based on simulated historical performance and (ii) the value of each ETF's benchmark index less the relevant ETF's current expense ratio. Investors should be aware that no actual investment which allowed a tracking of the performance of the index was possible at any time prior to March 7, 2017. Such data must be considered illustrative only. The historical data may not reflect future performance and no assurance can be given as to the level of the index at any time. Because the Morgan Stanley Two Year Treasury Index and certain ETFs included in the Index Components existed for only a portion of the back-tested period, substitute data have been used for portions of the simulation. Wherever data for the Morgan Stanley Two Year Treasury Index or one or more ETFs did not exist, the simulation has included (i) the value of the Morgan Stanley Two Year Treasury Index based on simulated historical performance and (ii) the value of each ETF's benchmark index less the relevant current expense ratio. The ETFs (and corresponding fund inception dates) for which substitute data have been used for all periods prior to the relevant inception date are: USMV (October 20, 2011), DVY (November 7, 2003), HYG (April 11, 2007), AGG (September 26, 2003), EMB (December 19, 2007), TIP (December 5, 2003), PFF (March 30, 2007), GLD (November 18, 2004), USO (April 10, 2006), VNQ (September 29, 2004) and UUP (February 20, 2007).
- **As the index is new and has very limited actual historical performance, any investment in the index may involve greater risk than an investment in an index with longer actual historical performance and a proven track record.** All information regarding the performance of the index prior to March 7, 2017 is hypothetical and back-tested, as the index did not exist prior to that time. It is important to understand that hypothetical back-tested index performance information is subject to significant limitations, in addition to the fact that past performance is never a guarantee of future performance. In particular:
 - Morgan Stanley & Co. International plc developed the rules of the index with the benefit of hindsight—that is, with the benefit of being able to evaluate how the index rules would have caused the index to perform had it existed during the hypothetical back-tested period.
 - According to Morgan Stanley & Co. International plc, for time periods prior to the launch of an Index Component and that Index Component's initial satisfaction of a minimum liquidity standard, the hypothetical back-tested data included in this CD were calculated using alternative performance information derived from a related index, after deducting hypothetical fund fees, rather than the performance information for that Index Component. This alternative performance information may differ, perhaps significantly, from the manner in which the relevant Index Components would have performed during the relevant period. As a result, the hypothetical back-tested index performance information, to the extent that it utilizes this alternative

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performance information, may not reflect how the index would have performed had it instead utilized the actual performance of the relevant Index Components.

- Certain of the Index Components have changed the underlying indices that they seek to track or track underlying indices that have made changes to their rules. As a result of these changes, the underlying indices to be tracked in the future by certain of the Index Components differ in certain respects from the underlying indices tracked by the same Index Components during certain portions of the back-tested period. The sponsor of any Index Component or its underlying index may make additional changes in the future. The hypothetical back-tested index performance may not reflect how the index would have performed had the relevant Index Components tracked the same underlying indices (with the same rules) during the full back-tested period that they will track in the future.
- The hypothetical back-tested performance of the index might look different if it covered a different historical period. The market conditions that existed during the historical period covered by the hypothetical back-tested index performance information in this CD are not necessarily representative of the market conditions that will exist in the future.

It is impossible to predict whether the index will rise or fall. The actual future performance of the index may bear little relation to the historical or hypothetical back-tested levels of the index.

- **The index is reduced by an excess return cost.** The level of the index is calculated as the excess of the weighted return of the Asset Portfolio over an equivalent cash investment receiving SOFR *plus* 0.26%. As a result, the level of the index reflects a deduction of SOFR *plus* 0.26% that would apply to such a cash investment, and is therefore less than the return on the weighted Asset Portfolio absent such excess return cost. Changes in SOFR will affect the value of the index. In particular, an increase in SOFR will negatively affect the value of the index. Interest rates, especially short-term rates such as SOFR, are significantly influenced by the Federal Reserve's monetary policy. Although the Federal Reserve has maintained interest rates at relatively low levels in recent years, the Federal Reserve may change its monetary policy at any time. The Federal Reserve has recently begun to raise interest rates and may continue to do so in the future. If the Federal Reserve raises interest rates again, or if interest rates otherwise rise, the index may be adversely affected. You should understand that interest rates are influenced by matters other than the Federal Reserve's monetary policy, and that interest rates may increase even if monetary policy does not change. For example, interest rates may be sensitive to perceptions about the creditworthiness of the U.S. government. In 2011, Standard & Poor's downgraded the U.S. government's credit rating. Any further downgrades in the credit rating or perceived creditworthiness of the U.S. government could increase the U.S. government's borrowing rates, which could have ripple effects that increase general interest rates, including SOFR.
- **The index contains embedded costs.** In addition to the excess return deduction, as described in more detail under "Annex A—Morgan Stanley MAP Trend Index" below, the index contains an embedded servicing cost of 0.85% per annum, calculated on a daily basis. Such cost is deducted when calculating the level of the index and will thus reduce the return of the index.
- **An investment in the CDs involves risks associated with emerging markets equities and bonds, currency exchange rates and commodities.** ETFs representing foreign equities (including emerging markets equities) can constitute up to 10% of the index. The index can also consist of certain ETFs representing emerging markets bonds. Therefore, an investment in the CDs involves risks associated with the securities markets in those foreign markets and emerging markets countries, including but not limited to risks of volatility in those markets, governmental intervention in those markets and cross-shareholdings in companies in certain countries. The prices of securities issued in foreign markets may be affected by political, economic, financial and social factors in those countries, or global regions, including changes in government, economic and fiscal policies and currency exchange laws. In addition, because the price of an ETF representing foreign securities is generally

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related to the U.S. dollar value of securities underlying the index tracked by such ETF, an investment in the CDs involves currency exchange rate risk with respect to each of the currencies in which such securities trade. Exchange rate movements for a particular currency are volatile and are the result of numerous factors including the supply of, and the demand for, those currencies, as well as relevant government policy, intervention or actions, but are also influenced significantly from time to time by political or economic developments, and by macroeconomic factors and speculative actions related to the relevant region.

In addition, potential Index Components also include ETFs representing commodities and thus investors in instruments linked to the index are exposed to risks associated with commodities. Investments linked to the prices of commodities are subject to sharp fluctuations in the prices of commodities over short periods of time for a variety of factors, including: changes in supply and demand relationships; weather; climatic events; the occurrence of natural disasters; wars; political and civil upheavals; acts of terrorism; trade, fiscal, monetary, and exchange control programs; domestic and foreign political and economic events and policies; disease; pestilence; technological developments; changes in interest rates; and trading activities in commodities and related contracts. These factors may affect the prices of commodities and therefore the value of the index and instruments linked to the index, in varying and potentially inconsistent ways.

- **Changes in the value of the Index Components may offset each other.** Because the Index Components represent a range of asset classes and geographic regions, price movements of Index Components representing different asset classes or geographic regions may not correlate with each other. At a time when the value of an Index Component representing a particular asset class or geographic region increases, the value of other Index Components representing different asset classes or geographic regions may not increase as much or may decline. Therefore, in calculating the level of the index, increases in the value of some of the Index Components may be moderated, or more than offset, by lesser increases or declines in the level of other Index Components.
- **The Morgan Stanley Two Year Treasury Index can produce negative returns, which may have an adverse effect on the level of the index.** The index methodology for the Morgan Stanley Two Year Treasury Index was developed based on historical data and conditions, and there can be no assurances that the methodology can generate positive performance in the future. Therefore, the past performance of the Morgan Stanley Two Year Treasury Index, whether actual or retrospectively calculated, is not a reliable indication of future performance. Poor performance by the Morgan Stanley Two Year Treasury Index will have a negative effect on the performance of the index.
- **Adjustments to the index could adversely affect the value of instruments linked to the index.** Morgan Stanley & Co. LLC, as the Calculation Agent and the Index Sponsor, can add, delete and/or substitute the Index Components, and can make other methodological changes, including as required by certain events relating to the Index Components. Any of these actions could adversely affect the value of instruments linked to the index. Morgan Stanley & Co. LLC may also discontinue or suspend calculation or publication of the index at any time. Morgan Stanley & Co. LLC could have an economic interest that is different than that of investors in instruments linked to the index.
- **Investing in the CDs is not equivalent to investing in the index.** Investing in the CDs is not equivalent to investing in the index or its component ETFs or the Morgan Stanley Two Year Treasury Index. Investors in the CDs will not have voting rights or rights to receive dividends or other distributions or any other right with respect to the component ETFs of the index. See “Hypothetical Payout on the CDs” above.
- **Reliance on information.** Unless otherwise stated, all calculations are based on information obtained from various publicly-available sources. Morgan Stanley has relied on these sources and not independently verified the information extracted from these sources. Morgan Stanley shall not be liable in any way for any calculations it performs in reliance on such information. The information used to undertake the Daily Rebalancings for the index will be the most up-to-date information available.

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- **Research.** Morgan Stanley may issue research reports on securities that are, or may become, constituents of an Index Component or an Index Component. These reports are entirely independent of the calculation agent's obligations hereunder. Morgan Stanley will be under no obligation to make any adjustments to the index or to reflect any change in outlook by Morgan Stanley Research.
- **You have no shareholder rights.** As an investor in the CDs, you will not have voting rights or rights to receive dividends or other distributions or any other rights with respect to the components that underlie the index.
- **Morgan Stanley & Co. LLC, which is an affiliate of the issuer, is both the calculation agent and the Index Sponsor.** Morgan Stanley & Co. LLC retains the final discretion as to the manner in which the index is calculated and constructed. Morgan Stanley & Co. LLC may change the methodology of the index or discontinue the publication of the index without prior notice and such changes or discontinuance may affect the value of the index. Morgan Stanley & Co.'s calculations and determinations in relation to the index shall be binding in the absence of manifest error.

Morgan Stanley & Co. LLC is also the index publisher of the The Morgan Stanley Two Year Treasury Index, a potential component of the index. The Morgan Stanley Two Year Treasury Index has been developed by Morgan Stanley & Co. LLC and will be calculated and rebalanced by Morgan Stanley & Co. LLC acting in such capacity.

In performing its duties as the calculation agent and the Index Sponsor, Morgan Stanley & Co. LLC may have interests adverse to the interests of an investor in an instrument linked to the index, which may affect the value of the index and the value of the CDs. In addition, MS & Co. has determined the estimated value of the CDs on the pricing date.

The deposit amount of the CDs includes the broker's commissions and certain costs of hedging our obligations under the CDs. The affiliates through which we hedge our obligations under the CDs expect to make a profit. Since hedging our obligations entails risk and may be influenced by market forces beyond our or our affiliates' control, such hedging may result in a profit that is more or less than initially projected.

- **The CDs are not trading instruments.** The CDs are not trading instruments and there may be little or no secondary market for the CDs. Even if there is a secondary market, it may not provide enough liquidity to allow you to trade or sell the CDs easily. Each broker, though not obligated to do so, may maintain a secondary market in the CDs. Each broker may at any time, without notice, discontinue participation in secondary market transactions in CDs. Accordingly, you should not rely on the possible existence of a secondary market for any benefits, including liquidity, achieving trading profits, or realizing income prior to maturity.
- **Your return may be lower than the return on other available investments.** The return on your investment in the CDs may be less than the return you could have earned on other investments, including a direct investment in each of the component ETFs or the Morgan Stanley Two Year Treasury Index. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money. This is because you have lost the use of the deposit amount deposited for the term of the CD. Opportunity cost is generally quantified by reference to a "risk-free rate of return" that could have been achieved had the deposit amount deposited been invested in safe fixed-income securities, such as U.S. Treasury bills for the same period. A depositor owning CDs will not own an interest or have any rights in the component ETFs or the Morgan Stanley Two Year Treasury Index.
- **Hedging and trading activity by our affiliates could potentially adversely affect the value of the CDs.** One or more of our affiliates and/or third-party brokers expect to carry out hedging activities related to the CDs (and to other instruments linked to the index or its component ETFs or the Morgan Stanley Two Year Treasury Index), including trading in the component ETFs and in other instruments related to the index. As a result, these entities may be unwinding or adjusting hedge positions during the term of the CDs, and the hedging strategy may involve greater and more frequent dynamic adjustments to the hedge as the final observation date approaches. Some of our affiliates also trade the component ETFs and other financial instruments related to the index on a regular basis as part of their general broker-dealer and other businesses. Any of these hedging or trading activities on or prior to the pricing date

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could potentially increase the initial index value, and, therefore, could increase the value at or above which the index must close on the final observation date before an investor receives a payment at maturity that exceeds the deposit amount of the CDs. Additionally, such hedging or trading activities during the term of the CDs, including on the final observation date, could adversely affect the closing value of the index on the final observation date, and, accordingly, the amount of cash an investor will receive at maturity.

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Morgan Stanley MAP Trend Index Overview

The Morgan Stanley MAP Trend Index has been developed by and is calculated, published and rebalanced by MS & Co. as the “index publisher.” The index employs a rules-based quantitative strategy that combines a risk-weighted approach to portfolio construction with a momentum-based, or trend-following, asset allocation methodology to construct a notional portfolio. In addition, the strategy imposes an overall volatility-targeting feature upon the resulting portfolio. The goal of the index is to maximize returns for a given level of risk based upon recent trends in the underlying assets. The investment assumption underlying the allocation strategy is two-fold: that historical volatility of the underlying assets can be used to risk-weight a portfolio, and that past trends are likely to continue to be a good indicator of the future performance of that portfolio. The index therefore seeks to capture returns by taking risk-weighted positions indicated by such trends. For additional information about the Morgan Stanley MAP Trend Index, see the information set forth under “Annex A—Morgan Stanley MAP Trend Index” below.

Hypothetical Retrospective and Historical Information

The inception date for the index was March 7, 2017. The information regarding the index prior to March 7, 2017 is a hypothetical retrospective simulation calculated by the index publisher, using the same methodology as is currently employed for calculating the index based on historical data. A retrospective simulation means that no actual investment which allowed a tracking of the performance of the index existed at any time during the period of the retrospective simulation. In addition, the Morgan Stanley Two Year Treasury Index and certain ETFs included in the Index Components existed for only a portion of period for which the index publisher calculates hypothetical retrospective values. For any period during which data for the Morgan Stanley Two Year Treasury Index or one or more ETFs did not exist, the historical simulation is based on (i) the value of the Morgan Stanley Two Year Treasury Index based on simulated historical performance and (ii) the value of each such ETF’s benchmark Index less the relevant ETF’s current expense ratio. The ETFs (and corresponding fund inception dates) for which data have been used for all periods prior to the relevant inception date are: USMV (October 20, 2011), DVY (November 7, 2003), HYG (April 11, 2007), AGG (September 26, 2003), EMB (December 19, 2007), TIP (December 5, 2003), PFF (March 30, 2007), GLD (November 18, 2004), USO (April 10, 2006), VNQ (September 29, 2004) and UUP (February 20, 2007). Therefore, information regarding the index prior to March 7, 2017 is hypothetical only and does not reflect actual historical performance. **Investors should be aware that no actual investment which allowed a tracking of the performance of the index was possible at any time prior to March 7, 2017. Such data must be considered illustrative only.**

You should not take the historical or hypothetical retrospective values of the index as an indication of its future performance.

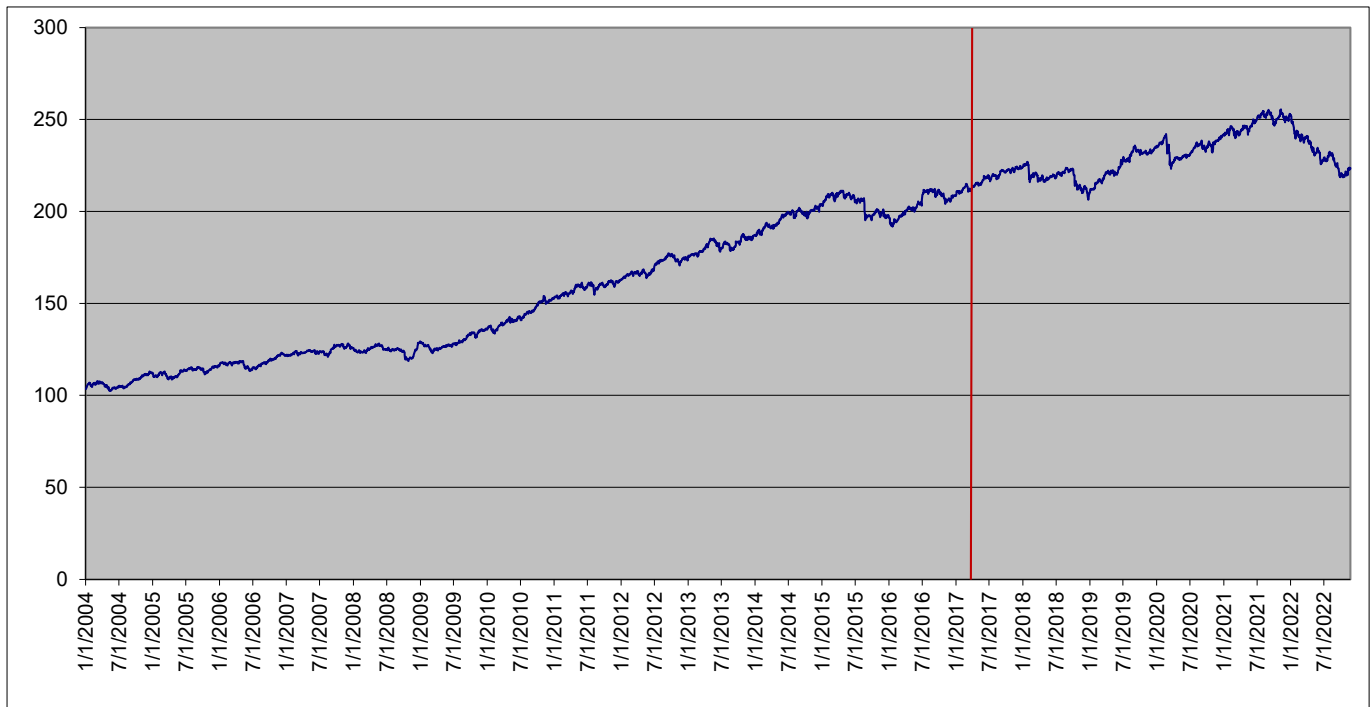
Information as of market close on November 22, 2022:

Bloomberg Ticker Symbol:	MSUSMAPT
Current Index Value:	223.63

The following graph sets forth the hypothetical retrospective and historical daily closing values of the index for the period from January 1, 2004 to November 22, 2022. The related table sets forth the hypothetical retrospective and historical high and low closing values, as well as end-of-quarter closing values, of the index for each quarter from January 1, 2017 through November 22, 2022. The closing value of the index on November 22, 2022 was 223.63. **The Index was established on March 7, 2017. The information prior to March 7, 2017 is a hypothetical retrospective simulation calculated by the index publisher and must be considered illustrative only.**

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Morgan Stanley MAP Trend Index Hypothetical Retrospective and Historical Performance
Daily Closing Values
January 1, 2004 to November 22, 2022



* The red vertical line indicates March 7, 2017, which is the date on which the index was established.

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Morgan Stanley MAP Trend Index	High	Low	Period End
2017			
First Quarter	215.03	209.44	213.33
Second Quarter	219.77	213.33	217.82
Third Quarter	222.66	216.41	221.64
Fourth Quarter	224.81	220.84	223.75
2018			
First Quarter	227.03	216.04	218.21
Second Quarter	220.19	216.12	218.55
Third Quarter	223.76	218.74	223.29
Fourth Quarter	223.03	206.39	210.06
2019			
First Quarter	221.42	210.46	221.42
Second Quarter	228.13	219.33	227.22
Third Quarter	235.94	226.90	232.48
Fourth Quarter	235.29	230.67	234.65
2020			
First Quarter	242.07	223.17	226.41
Second Quarter	231.08	226.55	231.08
Third Quarter	238.55	231.13	234.57
Fourth Quarter	242.28	232.08	242.28
2021			
First Quarter	246.48	239.84	242.50
Second Quarter	250.10	241.72	249.95
Third Quarter	255.26	247.01	247.01
Fourth Quarter	255.50	246.58	252.33
2022			
First Quarter	252.05	237.33	240.22
Second Quarter	241.04	225.75	228.20
Third Quarter	232.46	218.65	218.65
Fourth Quarter (through November 22, 2022)	223.97	218.51	223.63

The Index was established on March 7, 2017. The information prior to March 7, 2017 is a hypothetical retrospective simulation calculated by the index publisher and must be considered illustrative only.

Hypothetical Index Return

The following table shows the hypothetical return on the index from January 1, 2004 to November 22, 2022. Because the publication of the index began on March 7, 2017, the return on the index shown below is retrospectively simulated. No actual investment which allowed a tracking of the performance of the index was possible at any time prior to March 7, 2017. Because the Morgan Stanley Two Year Treasury Index and certain ETFs included in the Index Components existed for only a portion of the back-tested period, substitute data have been used for portions of the simulation.

Index Returns¹

	1/1/2004– 11/22/2022	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 ²
Returns	4.16%	8.30%	3.10%	5.04%	3.19%	2.81%	5.13%	12.77%	6.51%	7.01%	7.32%	8.57%	-2.94%	5.59%	7.39%	-6.09%	11.71%	3.24%	4.15%	-11.37%

Data based on simulated returns from January 1, 2004 to March 7, 2017 and actual returns thereafter.

¹ All returns except year-to-date 2022 returns are annualized.

² Year-to-date 2022 returns are not annualized.

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Additional Terms of the CDs

Please read this information in conjunction with the summary terms on the front cover of this document.

Additional Terms:	
Index publisher:	Morgan Stanley & Co. LLC, or any successor thereof
Denominations:	\$1,000 and integral multiples thereof
Net proceeds to the issuer:	\$
Interest:	None
Call option:	The CDs are not callable at the option of MSBNA.
Payment at maturity:	At maturity, you will receive a cash payment, for each \$1,000 CD, of your deposit amount (\$1,000 per CD) plus the supplemental amount, if any. You will receive no other interest or dividend payments during the term of the CDs.
Postponement of maturity date:	If the final observation date is postponed so that it falls less than two business days prior to the scheduled maturity date, the maturity date will be postponed to the second business day following the final observation date as postponed.
Postponement of final observation date:	If a market disruption event with respect to the index occurs on the scheduled final observation date, or if the scheduled final observation date is not an index business day, the index closing value for such day will be determined on the immediately succeeding index business day on which no market disruption event will have occurred with respect to the index; <i>provided</i> that the final index value will not be determined on a date later than the fifth scheduled index business day after the scheduled final observation date, and if such date is not an index business day, or if there is a market disruption event on such date, the calculation agent will determine the final index value using the index closing value as determined by the calculation agent in accordance with the formula for calculating the index last in effect prior to the commencement of the market disruption event (or prior to the non-index business day), without rebalancing or substitution, using the closing price or closing index value (or, if trading in the relevant securities has been materially suspended or materially limited, its good faith estimate of the closing price or index closing value that would have prevailed but for such suspension, limitation or non-index business day) on such date of each ETF or the Morgan Stanley Two Year Treasury Index most recently constituting the index.
Index closing value:	<p>The index closing value on any index business day will equal the closing value of the index or any successor index (as defined under "Discontinuance of the Index; alteration of method of calculation" below) published at the regular weekday close of trading on that index business day.</p> <p>In this "Additional Terms of the CDs," references to the index will include any successor index, unless the context requires otherwise.</p>
Business day:	Any day other than a Saturday or Sunday which is neither a legal holiday nor a day on which banking institutions are required or authorized by law or regulation to close in New York, NY or the city and state of our principal place of business or a day on which transactions in dollars are not conducted.
Index business day:	A day, as determined by the calculation agent, on which trading is generally conducted on each of the relevant exchange(s), other than a day on which trading on such exchange(s) is scheduled to close prior to the time of the posting of its regular final weekday closing price. We also refer to the index business day as the trading day.
Calculation agent:	<p>MS & Co.</p> <p>All determinations made by the calculation agent will be at the sole discretion of the calculation agent and will, in the absence of manifest error, be conclusive for all purposes and binding on you and on us.</p> <p>All calculations with respect to the payment at maturity will be made by the calculation agent and will be rounded to the nearest one hundred-thousandth, with five one-millionths rounded upward (e.g., .876545 would be rounded to .87655); all dollar amounts related to determination of the amount of cash payable per CD will be rounded to the nearest ten-thousandth, with five one hundred-thousandths rounded upward (e.g., .76545 would be rounded up to .7655); and all dollar amounts paid on the aggregate number of the CDs will be rounded to the nearest cent, with one-half cent rounded upward.</p>

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Market disruption event:	<p>Market disruption event means the occurrence or existence of any of the following events with respect to any ETF included in the index, as determined by the calculation agent in its sole discretion:</p> <p>(i) (a) a suspension, absence or material limitation of trading of the ETF on the primary market for the ETF for more than two hours of trading or during the one-half hour period preceding the close of the principal trading session in such market; or</p> <p>(b) a breakdown or failure in the price and trade reporting systems of the primary market for the ETF as a result of which the reported trading prices for the ETF during the last one-half hour preceding the close of the principal trading session in such market are materially inaccurate; or the suspension, absence or material limitation of trading on the primary market for trading in futures or options contracts related to the ETF, if available, during the one-half hour period preceding the close of the principal trading session in the applicable market; or</p> <p>(c) the suspension, material limitation or absence of trading on any major U.S. securities market for trading in futures or options contracts related to the ETF underlying index or the ETF for more than two hours of trading or during the one-half hour period preceding the close of the principal trading session on such market; and</p> <p>(ii) a determination by the calculation agent in its sole discretion that any event described in clause (a), (b) or (c) above materially interfered with our ability or the ability of any of our affiliates to unwind or adjust all or a material portion of the hedge position with respect to the CDs.</p> <p>For the purpose of determining whether a market disruption event exists at any time, if trading in an ETF included in the index is materially suspended or materially limited at that time, then the relevant percentage contribution of that ETF to the value of the index shall be based on a comparison of (x) the portion of the value of the index attributable to that ETF relative to (y) the overall value of the index, in each case immediately before the suspension or limitation.</p> <p>For the purpose of determining whether a market disruption event has occurred: (1) a limitation on the hours or number of days of trading will not constitute a market disruption event if it results from an announced change in the regular business hours of the relevant exchange or market, (2) a decision to permanently discontinue trading in the ETF or in futures or options contract related to the ETF underlying index or the ETF will not constitute a market disruption event, (3) a suspension of trading in futures or options contracts on the ETF underlying index or the ETF by the primary securities market trading in such contracts by reason of (a) a price change exceeding limits set by such securities exchange or market, (b) an imbalance of orders relating to such contracts or (c) a disparity in bid and ask quotes relating to such contracts will constitute a suspension, absence or material limitation of trading in futures or options contracts related to the ETF underlying index or the ETF and (4) a "suspension, absence or material limitation of trading" on any relevant exchange or on the primary market on which futures or options contracts related to the ETF underlying index or the ETF are traded will not include any time when such securities market is itself closed for trading under ordinary circumstances.</p>
Relevant exchange:	The primary exchange(s) or market(s) of trading for any ETF then-included in the index, or any successor index.
Governing law:	The CDs will be governed by and interpreted in accordance with the laws of the State of New York.
Discontinuance of the index; alteration of method of calculation:	<p>If the index publisher discontinues publication of the index and the index publisher or another entity publishes a successor or substitute index that MS & Co., as the calculation agent, determines, in its sole discretion, to be comparable to the discontinued index (such index being referred to herein as a "successor index"), then any subsequent index closing value will be determined by reference to the published value of such successor index at the regular weekday close of trading on any index business day that the index closing value is to be determined, and, to the extent the index closing value of such successor index differs from the index closing value of the index at the time of such substitution, a proportionate adjustment will be made by the calculation agent to the initial index value.</p> <p>Upon any selection by the calculation agent of a successor index, the calculation agent will cause written notice thereof to be furnished to the trustee, to us and to DTC, as holder of the CDs, within three business days of such selection. We expect that such notice will be made available to you, as a beneficial owner of the relevant CDs, in accordance with the standard rules and procedures of DTC and its direct and indirect participants.</p> <p>If the index publisher discontinues publication of the index and the calculation agent determines, in its sole discretion, that no successor index is available, then, on the date of such determination, the calculation agent will determine, in good faith and in a commercially reasonable manner, an alternative supplemental amount, which will equal its estimate of the value, if any, of the investors' forgone opportunity to receive any</p>

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supplemental amount, determined by reference to the calculation agent's pricing models, inputs, assumptions about future market conditions including, without limitation, the volatility of the MAP Trend Index and its components and current and expected interest rates. The alternative supplemental amount, if any, will be paid at maturity in addition to the deposit amount of the CDs.

Issuer notices to CD holders, DTC and the paying agent:

We will, or will cause the calculation agent to (i) provide written notice to The Depository Trust Company ("DTC") of the amount of cash to be delivered with respect to the \$1,000 deposit amount of each CD, on or prior to 10:30 a.m. on the index business day preceding the maturity date (but if such index business day is not a business day, prior to the close of business on the business day preceding the maturity date), and (ii) deliver the aggregate cash amount due with respect to the CDs to the paying agent for delivery to DTC, as holder of the CDs, on the maturity date. We expect such amount of cash will be distributed to depositors on the maturity date in accordance with the standard rules and procedures of DTC and its direct and indirect participants. See "Book-entry only issuance—DTC" below, and see "Evidence of the CDs" in the accompanying disclosure statement.

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Additional Information About the CDs

Additional Information:

Additional information regarding early withdrawals:

By your purchase of a CD you are deemed to represent to us that your deposits with us, including the CDs, when aggregated in accordance with FDIC regulations are within the \$250,000 FDIC insurance limit for each ownership capacity, as described in the disclosure statement under "Deposit Insurance." For purposes of early withdrawal upon your death or adjudication of incompetence, we will limit the combined aggregate deposit amount of (i) these CDs and (ii) any other CDs of ours subject to this withdrawal limit to the FDIC insurance coverage amount applicable to each ownership capacity in which such CDs are held. All issues regarding eligibility for early withdrawal will be determined by us in our sole discretion. Written verification acceptable to us will be required to permit early withdrawal.

See "Description of the CDs—Estate feature of the CDs" in the accompanying disclosure statement.

Please contact us if you have any questions concerning the application of the limit on early withdrawal to your CDs.

Minimum ticketing size:

\$1,000 / 1 CD

Tax considerations:

The CDs will be treated as "contingent payment debt instruments" for U.S. federal income tax purposes, as described in the section of the accompanying disclosure statement called "United States Federal Taxation—Tax Consequences to U.S. Holders—Contingent Payment CDs." Under this treatment, if you are a U.S. taxable investor, you generally will be subject to annual income tax based on the "comparable yield" (as defined in the accompanying disclosure statement) of the CDs, adjusted upward or downward to reflect the difference, if any, between the actual and projected amount of the payments on the CDs. The comparable yield will be determined on the pricing date and may be significantly higher or lower than the comparable yield if the CDs were priced on the date hereof. The comparable yield and the projected payment schedule (or information about how to obtain them) will be provided in the final disclosure supplement. In addition, any gain recognized by U.S. taxable investors on the sale or exchange, or at maturity, of the CDs generally will be treated as ordinary income.

You should read the discussion under "United States Federal Taxation" in the accompanying disclosure statement concerning the U.S. federal income tax consequences of an investment in the CDs.

The comparable yield and the projected payment schedule will not be provided for any purpose other than the determination of U.S. Holders' accruals of interest income and adjustments thereto in respect of the CDs for U.S. federal income tax purposes, and we make no representation regarding the actual amount of the payments that will be made on the CDs.

If you are a non-U.S. investor, please also read the section of the accompanying disclosure statement called "United States Federal Taxation—Tax Consequences to Non-U.S. Holders."

As discussed in the accompanying disclosure statement, Section 871(m) of the Internal Revenue Code of 1986, as amended, and Treasury regulations promulgated thereunder ("Section 871(m)") generally impose a 30% (or a lower applicable treaty rate) withholding tax on dividend equivalents paid or deemed paid to Non-U.S. Holders with respect to certain financial instruments linked to U.S. equities or indices that include U.S. equities (each, an "Underlying Security"). Subject to certain exceptions, Section 871(m) generally applies to securities that substantially replicate the economic performance of one or more Underlying Securities, as determined based on tests set forth in the applicable Treasury regulations (a "Specified Security"). However, pursuant to an Internal Revenue Service ("IRS") notice, Section 871(m) will not apply to securities issued before January 1, 2025 that do not have a delta of one with respect to any Underlying Security. Based on the terms of the CDs and current market conditions, we expect that the CDs will not have a delta of one with respect to any Underlying Security on the pricing date. However, we will provide an updated determination in the final disclosure supplement. Assuming that the CDs do not have a delta of one with respect to any Underlying Security, the CDs should not be Specified Securities and, therefore, should not be subject to Section 871(m). Our determination is not binding on the IRS, and the IRS may disagree with this determination. Section 871(m) is complex and its application may depend on your particular circumstances, including whether you enter into other transactions with respect to an Underlying Security. **If withholding is required, we will not be required to pay any additional amounts with respect to the amounts so withheld.** You should consult your tax adviser regarding the potential application of Section 871(m) to the CDs.

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You should consult your tax adviser regarding all aspects of the U.S. federal income tax consequences of an investment in the CDs, as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Book-entry only issuance—DTC:

DTC will act as depository for the CDs. The CDs will be evidenced by one or more master certificates issued by MSBNA, each representing a number of individual CDs. One or more master certificates will be issued and will be deposited with DTC. See the description contained in the accompanying disclosure statement under the heading “Evidence of the CDs.”

Use of proceeds and hedging:

The deposit amount of the CDs includes the compensation paid to brokers with respect to the CDs and the cost of hedging our obligations under the CDs. The cost of hedging includes the projected profit that our affiliates expect to realize in consideration for assuming the risks inherent in managing the hedging transactions. Since hedging our obligations entails risk and may be influenced by market forces beyond our or our affiliates’ control, such hedging may result in a profit that is more or less than initially projected, or could result in a loss.

On or prior to the pricing date, we expect to hedge our anticipated exposure in connection with the CDs by entering into hedging transactions with our affiliates and/or third-party brokers. We expect our hedging counterparties to take positions in the component ETFs, in options contracts on the component ETFs, or positions in any other available securities or instruments that they may wish to use in connection with such hedging. Such purchase activity could increase the value of the index on the pricing date, and, therefore, the value at or above which the index must close on the final observation date before you would receive at maturity a payment that exceeds the deposit amount of the CDs. In addition, through our affiliates, we are likely to modify our hedge position throughout the term of the CDs, including on the final observation date, by purchasing and selling the component ETFs or positions in any other available securities or instruments that we may wish to use in connection with such hedging activities. As a result, these entities may be unwinding or adjusting hedge positions during the term of the CDs, and the hedging strategy may involve greater and more frequent dynamic adjustments to the hedge as the final observation date approaches. We cannot give any assurance that our hedging activities will not affect the value of the index, and, therefore, adversely affect the value of the CDs or the payment you will receive at maturity.

Benefit plan investor considerations:

Each fiduciary of a pension, profit-sharing or other employee benefit plan subject to Title I of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”) (a “Plan”), should consider the fiduciary standards of ERISA in the context of the Plan’s particular circumstances before authorizing an investment in the CDs. Accordingly, among other factors, the fiduciary should consider whether the investment would satisfy the prudence and diversification requirements of ERISA and would be consistent with the documents and instruments governing the Plan.

In addition, we and certain of our affiliates, including MS & Co., may each be considered a “party in interest” within the meaning of ERISA, or a “disqualified person” within the meaning of the Internal Revenue Code of 1986, as amended (the “Code”), with respect to many Plans, as well as many individual retirement accounts and Keogh plans (such accounts and plans, together with other plans, accounts and arrangements subject to Section 4975 of the Code, also “Plans”). ERISA Section 406 and Code Section 4975 generally prohibit transactions between Plans and parties in interest or disqualified persons. Prohibited transactions within the meaning of ERISA or the Code would likely arise, for example, if the CDs are acquired by or with the assets of a Plan with respect to which MS & Co. or any of its affiliates is a service provider or other party in interest, unless the CDs are acquired pursuant to an exemption from the “prohibited transaction” rules. A violation of these “prohibited transaction” rules could result in an excise tax or other liabilities under ERISA and/or Section 4975 of the Code for such persons, unless exemptive relief is available under an applicable statutory or administrative exemption.

The U.S. Department of Labor has issued five prohibited transaction class exemptions (“PTCEs”) that may provide exemptive relief for direct or indirect prohibited transactions resulting from the purchase or holding of the CDs. Those class exemptions are PTCE 96-23 (for certain transactions determined by in-house asset managers), PTCE 95-60 (for certain transactions involving insurance company general accounts), PTCE 91-38 (for certain transactions involving bank collective investment funds), PTCE 90-1 (for certain transactions involving insurance company separate accounts) and PTCE 84-14 (for certain transactions determined by independent qualified professional asset managers). In addition, ERISA Section 408(b)(17) and Section 4975(d)(20) of the Code may provide an exemption for the purchase and sale of CDs and the related lending transactions, *provided* that neither the issuer of the CDs nor any of its affiliates has or exercises any discretionary authority or control or renders any investment advice with respect to the assets of the Plan.

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involved in the transaction and *provided further* that the Plan pays no more, and receives no less, than “adequate consideration” in connection with the transaction (the so-called “service provider” exemption). There can be no assurance that any of these class or statutory exemptions will be available with respect to transactions involving the CDs.

Because we may be considered a party in interest with respect to many Plans, the CDs may not be purchased, held or disposed of by any Plan, any entity whose underlying assets include “plan assets” by reason of any Plan’s investment in the entity (a “Plan Asset Entity”) or any person investing “plan assets” of any Plan, unless such purchase, holding or disposition is eligible for exemptive relief, including relief available under PTCs 96-23, 95-60, 91-38, 90-1, 84-14 or the service provider exemption or such purchase, holding or disposition is otherwise not prohibited. Any purchaser, including any fiduciary purchasing on behalf of a Plan, transferee or holder of the CDs will be deemed to have represented, in its corporate and its fiduciary capacity, by its purchase and holding of the CDs that either (a) it is not a Plan or a Plan Asset Entity and is not purchasing such CDs on behalf of or with “plan assets” of any Plan or with any assets of a governmental, non-U.S. or church plan that is subject to any federal, state, local or non-U.S. law that is substantially similar to the provisions of Section 406 of ERISA or Section 4975 of the Code (“Similar Law”) or (b) its purchase, holding and disposition of the CDs will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or violate any Similar Law.

Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries or other persons considering purchasing the CDs on behalf of or with “plan assets” of any Plan consult with their counsel regarding the availability of exemptive relief.

Each purchaser and holder of the CDs has exclusive responsibility for ensuring that its purchase, holding and disposition of the CDs do not violate the prohibited transaction rules of ERISA or the Code or any Similar Law. The sale of any CDs to any Plan or plan subject to Similar Law is in no respect a representation by us or any of our affiliates or representatives that such an investment meets all relevant legal requirements with respect to investments by plans generally or any particular plan, or that such an investment is appropriate for plans generally or any particular plan. In this regard, neither this discussion nor anything provided in this disclosure statement is or is intended to be investment advice directed at any potential Plan purchaser or at Plan purchasers generally and such purchasers of the CDs should consult and rely on their own counsel and advisers as to whether an investment in the CDs is suitable.

However, individual retirement accounts, individual retirement annuities and Keogh plans, as well as employee benefit plans that permit participants to direct the investment of their accounts, will not be permitted to purchase or hold the CDs if the account, plan or annuity is for the benefit of an employee of Morgan Stanley or Morgan Stanley Wealth Management or a family member and the employee receives any compensation (such as, for example, an addition to bonus) based on the purchase of the CDs by the account, plan or annuity.

Supplemental information regarding plan of distribution; conflicts of interest:

Under the arrangements established by the brokers with MSBNA, each broker will receive a fee of \$ per \$1,000 CD, or % of the deposit amount of the CDs, which includes compensation paid to other brokers. An affiliate of MSBNA may also receive fees from MSBNA in respect of hedging arrangements entered into with respect to the CDs.

MS & Co. is our affiliate and it and other affiliates of ours expect to make a profit by selling, structuring and, when applicable, hedging the CDs. When MS & Co. prices this offering of CDs, it will determine the economic terms of the CDs, including the participation rate, such that for each CD the estimated value on the pricing date will be no lower than the minimum level described in “Investment Summary” beginning on page 3.

Contact:

MSBNA clients may contact MSBNA at 750 Seventh Avenue, New York, New York 10019, Attention: Hiren Thadani, Controller, 646-536-6621.

Where you can find more information:

We file annual and quarterly Consolidated Reports of Condition and Income (FFIEC 031) (“Call Reports”) with the Office of the Comptroller of the Currency (“OCC”). Our Call Reports are available on the Federal Financial Institutions Examination Council (“FFIEC”) website at <https://cdr.ffiec.gov/public/> or by calling the OCC Customer Assistance Group in English or Spanish at 1 (800) 613-6743 or TDD Number (713) 658-0340 or upon request to us. Reference to these “uniform resource locators” or “URLs” is made as an inactive textual reference for informational purposes only. Other information found at these websites is not incorporated by reference in this disclosure statement.

We incorporate by reference into this disclosure supplement our Call Reports for the years ended December 31,

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2021, 2020 and 2019 and any future Call Reports we file with the OCC (as well as, in the case of any future quarterly Call Report, the corresponding Call Report for the same quarter one year before) until we complete our offering of the CDs. Although the information in our Call Reports is derived from the financial reporting system used to produce our financial statements in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"), the information in our Call Reports may differ, sometimes materially, from our audited financial statements for the corresponding period or at the corresponding date as a result of differences in the classification or presentation of items in accordance with the instructions for preparing the Call Reports.

Terms used but not defined in this document are defined in the disclosure statement. As used in this document, the "Company," "we," "us" and "our" refer to MSBNA.

You may access the accompanying disclosure statement on the Morgan Stanley website as follows:

[Disclosure Statement Dated April 30, 2020](#)

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Annex A—Morgan Stanley MAP Trend Index

Overview

The Morgan Stanley MAP Trend Index (the “**Index**”) has been developed by and is calculated, published and maintained by Morgan Stanley & Co. LLC. MAP stands for “Multi-Asset Portfolio.” The Index was established by Morgan Stanley on March 7, 2017 and employs a rules-based quantitative strategy (the “**Index Methodology**”) that combines a risk-weighted approach to portfolio construction with a momentum-based, or trend-following, asset allocation methodology to construct a notional portfolio. In addition, the strategy imposes an overall volatility-targeting feature upon the resulting portfolio. The goal of the Index is to maximize returns for a given level of risk based upon recent trends in the underlying assets. The investment assumption underlying the allocation strategy is two-fold: that historical volatility of the underlying assets can be used to risk-weight a portfolio, and that past trends are likely to continue to be a good indicator of the future performance of that portfolio. The Index therefore seeks to capture returns by taking risk-weighted positions indicated by such trends. As the portfolio is risk-weighted based upon a pre-set allocation as modified by recent volatility, increased volatility in an underlying asset will result in reduced exposure to that asset, potentially at a time when that asset then increases in value; at the same time, lower volatility will result in higher exposure, potentially at a time when the asset starts to decline in value. In addition, as a trend-following, momentum-based index, the Index will tend to perform well when prices on the relevant ETFs are steadily trending either up or down. On the other hand, the Index will likely perform poorly when prices on the relevant ETFs do not move in a consistent manner, and, in particular, when they experience sharp reversals, in which case the Index will likely allocate to ETFs that trended upward, but that are now declining. In addition, sharp, correlated reversals in the equity markets as a whole will also have an adverse effect on the level of the Index, as any diversification benefits inherent in investing in a variety of ETFs will be lost.

The components of the Index consist of (i) 20 U.S.-listed exchange traded funds (“**ETFs**”), representing U.S. and non-U.S. equities, fixed income securities, commodities and real estate, and (ii) the Morgan Stanley Two Year Treasury Index (collectively, the “**Index Components**”). The notional portfolio constructed by the Index Methodology of Index Components is referred to as the “**Asset Portfolio**.” The Asset Portfolio will consist of long-only positions in each Index Component, and each Index Component except for the Morgan Stanley Two Year Treasury Index is subject to a maximum exposure cap. The actual number of ETFs represented in the Asset Portfolio will be determined according to the Index Methodology but will likely be less than 20 at any one time and, if all the ETFs are trending down, could be only the Morgan Stanley Two Year Treasury Index. The targeted volatility for the Index is 5% (the “**Volatility Target**”).

The Index is calculated on an excess return basis, and therefore the level is determined by the weighted return of the Asset Portfolio reduced by the return on an equivalent cash investment receiving SOFR *plus* 0.26%. The Index performance is further reduced by a servicing cost of 0.85% per annum calculated on a daily basis.

Calculation of Pre-Signal Base Allocation for each ETF

The Index is rebalanced each Strategy Business Day (the “**Daily Rebalancing**”). Upon each Daily Rebalancing for the Index, the Index Methodology uses the pre-assigned Risk Budget assigned to each ETF which remains static throughout the life of the Index and is set forth in the table below. Based upon those pre-set Risk Budgets, the Index Methodology determines the base allocation of each ETF in the Asset Portfolio by analyzing the volatility for each ETF and the historical correlation among the components. The base allocation of ETFs will be proportional to each ETFs’ Risk Budget and the inverse of each ETF’s volatility and scaled based upon the volatility of the other ETFs to 100% exposure.¹ Assuming that two ETFs have the same Risk Budget, this initial weighting scheme allocates more to less volatile assets

¹ Look-back period for volatility for the pre-signal allocation is approximately one year.

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and less to more volatile assets.² While the Risk Budget is used to determine proportions for the pre-signal base allocations, those pre-signal base allocations can be higher or lower than the original Risk Budget; however, after the entirety of the Index calculation is complete, no ETF's exposure will exceed its maximum exposure cap as listed in the table below.

Determining the Trend Signal for each ETF

The Index Methodology then calculates a signal based on the upward or downward trend of each ETF (the "**Trend Signal**"). The Index calculates each Trend Signal by observing two moving averages, one short-term and one long-term, over different look-back periods for each respective ETF.³ These moving averages are calculated using a formula that considers the entirety of the look-back period but gives more weight to the recent data points than the data points further in the past. For some of the less liquid ETFs, a signal-smoothing moving average is incorporated that creates a weighted average of the Trend Signal using the prior two or three days of signal data in order to try to avoid unrepresentative signals due to that relative illiquidity.⁴ A Trend Signal that converges toward one indicates an upward trend and a Trend Signal that converges toward zero indicates a downward trend.

The Index compares each ETF's short-term and long-term moving averages against its spot horizon to determine the Trend Signal. An ETF's spot horizon value is not always its most recent price and, in the equity and alternatives asset classes, the date for determining the spot horizon is a date 4 Strategy Business Days before the short-term horizon date, which is typically the Strategy Business Day prior to the Rebalancing Date. The result of this is that the Index, in the equity and alternatives asset classes, will allocate more exposure to ETFs that are trending down in the short-term and less to ETFs that are trending up in the short-term in an effort to capitalize on possible countertrends or overreactions in the market. However, if a short-term downward trend persists and the ETF steadily declines, the Trend Signal in these asset classes will remain at 1 and therefore the Index will be fully exposed to the decline. The Trend Signal will remain at 1 until the ETF begins trending up and the short-term horizon exceeds the spot horizon or continues declining such that the spot horizon is below the long-term horizon. Even if the spot horizon falls below the long-term horizon, the Index will not fully divest its position until the spot horizon of the ETF is down compared to both the long-term horizon and the short-term horizon.

Scaling of Allocation of ETFs According to Trend Signal

Once the Trend Signal is calculated for each ETF, the previously determined base allocations are scaled by the Trend Signal by allocating more upward-trending securities to the Asset Portfolio subject to each ETFs' maximum exposure cap as outlined in the table below. The magnitude of each position taken by the Index following the Trend Signal adjustment is then scaled to the Volatility Target based on a pro-rata volatility-scaling that seeks to achieve a balanced level of volatility in the Index's exposure to each of the ETFs. The volatility of the Index is calculated by estimating the volatility of each ETF adjusted for correlations over a period of approximately 30 and 60 days. The higher volatility of the two time

² Volatility is a market standard statistical measure of the magnitude and frequency of price changes of a financial asset over a period of time, used to express the riskiness of the asset. Note, however, that volatility does not identify the direction of the asset's price movement.

³ The look-back period for each moving average is asset-class dependent. Equity ETFs have a short term period of 1 day, a long term period of 200 days and a spot horizon of 5 days. Fixed Income ETFs have a short term period of 5 days, a long term period of 20 days and a spot horizon of 1 day. Alternative ETFs have a short term period of 5 days, a long term period of 200 days and a spot horizon of 5 days.

⁴ As classified in the table below, Other Equity ETFs have a signal smoothing period of 2 days. Core Fixed Income ETFs have a signal smoothing period of 2 days while Other Fixed Income ETFs have a signal smoothing period of 3 days.

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periods is used to scale the Index's exposure to the ETFs. ETFs with a Trend Signal of 0 on a Rebalancing Day will not be allocated any exposure and therefore will not be a part of the Asset Portfolio on that day. Any unused exposure is allocated to the Morgan Stanley Two Year Treasury Index. Because the Index is limited to 125% leverage it may not be possible to achieve the Volatility Target of 5% during periods of very low volatility. Moreover, the volatility of the Index may exceed the 5% Volatility Target in times of extreme volatility due to trading limits on the ETFs. The daily trading limit for each ETF is one-third of the maximum exposure cap. Once the composition of the Asset Portfolio is determined, the Index value is equivalent to the sum of each Index Component's market price less the excess return cost of SOFR *plus* 0.26% and the servicing cost of 0.85% per annum.

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Morgan Stanley MAP Trend Index – Summary

The procedure for determining the composition of the Asset Portfolio is summarized in the graphic and bullets below:



- Base allocations depend on each ETF's liquidity and are proportional to the Risk Budget and the inverse of each ETF's relative historical realized volatility scaled to 100%.
- All things being equal, this weighting scheme allocates more to less volatile assets and less to more volatile assets.
- For each ETF, compute one short-term and one long-term moving average.
- Compare the short-term and long-term moving averages versus the ETF spot price, a Trend Signal of 100% indicates an upward trend and a Trend Signal 0% indicates a downward trend.⁵ If applicable, the Trend Signal is smoothed over a few days for the less liquid ETFs.
- Scale the base allocations by the Trend Signal for each ETF.
- The maximum exposure caps on each Rebalancing Date for each Index Component are specified in the table below.
- Estimate the volatility of the portfolio and scale the allocations to target a 5% volatility. Because the ETFs are subject to a maximum exposure cap and the Index is limited to 125% leverage, it may not be possible to achieve the Volatility Target of 5% during periods of very low volatility.
- Allocate any unused exposure into Morgan Stanley Two Year Treasury Index.
- The level of the Index is calculated on an excess return basis and is determined by the weighted return of the Asset Portfolio *reduced* by the return on an equivalent cash investment receiving SOFR *plus* 0.26% and a servicing cost of 0.85% per annum.

⁵ Note that because the spot horizon period is longer than the short-term horizon period for ETFs in the equity and alternative asset classes of the index, an actual upward trend in an ETF may result in a Trend Signal less than 1 and therefore the Index may divest itself of these ETFs despite recent positive movement.

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Index Components

The potential Index Components included in the Index and the maximum asset weightings on each Rebalancing Date for each Index Component are specified in the table below.

Equities	Ticker	Maximum Exposure Cap	Risk Budget*
Core			
SPDR S&P 500	SPY	25%	11%
PowerShares QQQ ETF	QQQ	25%	11%
iShares Russell 2000	IWM	25%	11%
iShares MSCI EAFE	EFA	5%	2%
iShares MSCI Emerging Markets	EEM	5%	2%
Others			
iShares Edge MSCI Minimum Volatility USA	USMV	5%	2%
iShares Nasdaq Biotechnology	IBB	5%	2%
iShares Select Dividend	DVY	3%	1%
Fixed Income			
Core			
iShares 20+ Year Treasury Bond	TLT	25%	11%
iShares 7-10 Year Treasury Bond	IEF	25%	11%
iShares iBoxx High Yield Corporate Bond	HYG	25%	11%
iShares iBoxx Investment Grade Corporate Bond	LQD	5%	2%
iShares Core US Aggregate Bond	AGG	5%	2%
Others			
iShares TIPS Bond	TIP	5%	2%
iShares JPMorgan USD Emerging Markets Bond	EMB	5%	2%
iShares US Preferred Stock	PFF	3%	1%
Alternatives			
SPDR Gold Shares	GLD	10%	4%
United States Oil	USO	10%	4%
Vanguard REIT ETF	VNQ	10%	4%
The PowerShares DB US Dollar Index Bullish Fund	UUP	10%	4%
Risk-Off			
Morgan Stanley Two Year Treasury Index	N/A	100%	N/A

*Rounded to the nearest percentage

The ETFs make periodic filings with the Securities and Exchange Commission ("SEC"). Information provided to or filed with the SEC by each ETF pursuant to the securities laws can be located 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. **Neither the issuer nor the agent makes any representation that such publicly available documents or any other publicly available information regarding the ETFs is accurate or complete.**

The Morgan Stanley Two Year Treasury Index has been developed by Morgan Stanley & Co. LLC (the "Sponsor") and will be calculated and rebalanced by Morgan Stanley & Co. LLC (acting in such capacity as the "Calculation Agent"). The Morgan Stanley Two Year Treasury Index is a rules-based index that seeks to capture the yield from US Treasury notes with a maturity of between two years and two years and three months by notionally purchasing futures contracts on US Treasury notes. The Morgan Stanley Two Year Treasury Index is published on Bloomberg under the ticker symbol MSUST2TR <Index>.

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The Morgan Stanley Two Year Treasury Index, including its name, methodology and levels (the “Index Information”) is the exclusive property of the Sponsor. Unless specifically agreed by the Sponsor, no third party is authorized to use the Index Information in any way. The Sponsor and its affiliates disclaim any responsibility for any unauthorized use of the Index Information by any third party intending to promote, sponsor, endorse, market, offer, sell, distribute or reference the Index Information or any product, service or contract relating or linked to or otherwise referencing the Index Information.

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The Secured Overnight Financing Rate (“SOFR”)

SOFR has been identified by the Federal Reserve Bank of New York’s Alternative Reference Rates Committee as its recommended alternative to U.S. dollar LIBOR and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. SOFR is published by the New York Federal Reserve, and its publication began on April 3, 2018. The New York Federal Reserve reports that SOFR is calculated as a volume-weighted median of transaction-level tri-party repo data collected from The Bank of New York Mellon as well as General Collateral Finance Repo transaction data and data on bilateral Treasury repo transactions cleared through the Fixed Income Clearing Corporation delivery-versus-payment service, which are obtained from DTCC Solutions LLC, an affiliate of the Depository Trust & Clearing Corporation. SOFR is filtered by the New York Federal Reserve to remove some (but not all) of the foregoing transactions considered to be “specials.”⁶

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

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

Adjustments, Disruptions and Errors

Definitions

⁶ According to the New York Federal Reserve, “specials” are repos for specific-issue collateral, which take place at cash-lending rates below those for general collateral repos because cash providers are willing to accept a lesser return on their cash in order to obtain a particular security.

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“**Rules**” means the description produced by Morgan Stanley that provides an overview of the methodology of the Strategy.

“**Strategy**” means the Morgan Stanley MAP Trend Strategy.

“**Strategy Business Day**” means a day that is not a public holiday in the New York Stock Exchange calendar or the Chicago Board of Trade calendar.

“**Strategy Calculation Agent**” is Morgan Stanley & Co. LLC.

“**Strategy Level**” means the calculation of the level of the Strategy.

“**Strategy Live Date**” is March 7, 2017

“**Strategy Sponsor**” is Morgan Stanley & Co. International plc.

Overview

The Strategy is calculated on the basis of algorithmic formulas and therefore no discretion can be exercised by the Strategy Sponsor or the Strategy Calculation Agent in the calculation of the Strategy. However, on occasion, there may be situations requiring adjustments to the Strategy that are outside the scheduled adjustments and rebalances. Such adjustments might be made by Strategy Sponsor or the Strategy Calculation Agent by having recourse to discretionary decisions. Any discretion will be used in a commercially reasonable manner and exclusively in order to ensure that the Strategy continues to reflect, as closely as possible, the value of the Strategy components in the sole determination of the Strategy Sponsor.

Adjustment Events

The Strategy Calculation Agent will determine whether a circumstance relating to any Index Component has a dilutive, concentrative or other effect on the theoretical value of such Index Component and, if so, will (1) make the corresponding adjustment, if any, to the Units or closing prices for such Index Component and/or any of the other provisions hereof as the Strategy Calculation Agent determines appropriate to account for that dilutive, concentrative or other effect; and (2) determine the effective date of that adjustment. As a result of the foregoing adjustments, the total number of Index Components may, on a given Strategy Business Day, increase or decrease.

Disruption Events

Each of the following is a “**Disruption Event**”:

- A **Material Change in the Index Components’ Methodology** occurs if the Strategy Sponsor determines that there has been a material change to the Index Components or other related indices and including hours of continuous market trading and publication of bid and ask prices or the de-listing of any of the Index Components;
- An **Underlying Strategy Disruption** occurs if any dependencies needed to calculate the Trend Signal are (i) not calculated and announced by the Strategy Sponsor (regardless of whether the dependencies are calculated by a successor sponsor or not); (ii) replaced by a successor Strategy using the same or substantially the same methodology; or (iii) cancelled permanently;
- A **Termination of Data License** occurs if the Strategy Sponsor determines there has been a termination, revocation or suspension of any third-party license agreement or permission pursuant to which data are supplied to compile or calculate the Strategy

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- A **Price Source Disruption** occurs if the Strategy Sponsor or the Strategy Calculation Agent determines that any of the source data required to calculate the Strategy are not available. This may include the published level of an ETF or data provided by a third party vendor. A Price Source Disruption may also include any permanent cancellation or prolonged suspension of any Index Component.
- A **Change in Law** occurs if there has been a change in applicable law or regulation that prevents the Strategy Sponsor and/or the Strategy Calculation Agent from calculating, publishing or hedging the Strategy.
- A **Hedging Disruption** occurs if the Strategy Sponsor determines that Morgan Stanley or any of its affiliates would be unable after using commercially reasonable efforts to:
 - acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transactions or instruments deemed necessary to hedge its position in relation to any relevant transactions relating to or calculated by reference to the Strategy; or
 - realize, recover or remit the proceeds of any such transactions or instruments;
- A **Force Majeure Event** occurs if the Strategy Sponsor determines that an event or circumstance has occurred that is beyond the reasonable control of the Strategy Sponsor and, as a result of which, the Strategy Sponsor or the Strategy Calculation Agent is unable to calculate, publish or take any other necessary action in relation to the Strategy. Such event or circumstance may include (without limitation) a systems failure, fire, building evacuation, natural or man-made disaster, act of state, armed conflict, act of terrorism, riot or labor disruption.

Potential Actions

In the event that the Strategy Sponsor determines that a Disruption Event has occurred, the Strategy Sponsor may in its discretion:

- substitute the relevant ETF with a replacement instrument, provided that such replacement is similarly representative of the existing Index Component;
- make such determinations or adjustments to the terms of the Strategy Methodology or the Index Components as it deems necessary including sourcing data from alternative providers;
- defer, or direct the Strategy Calculation Agent to defer, the availability of the Strategy until the next Strategy Business Day on which there is no Disruption Event;
- reallocate all or a portion of the Strategy exposure to cash or cash equivalents; or
- instruct the Strategy Calculation Agent to cease to calculate and make available the Strategy permanently.

Index Component Adjustments

Any adjustments required for Index Components will be made in accordance with the standard exchange methodology. Examples of adjustments include change of units, close price determination or change in expiration schedule or first delivery dates.

Increased Costs

If at any time following the Strategy Live Date, due to the adoption of or any change in any applicable law or regulation or any event outside of its control, the Strategy Sponsor determines in good faith that a party would incur

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an increased cost in effecting transactions in the Index Components to reflect the notional exposure to the Strategy performance, the Strategy Sponsor retains the right to make any adjustments to the strategy methodology so that the Strategy performance takes account of such increased costs.

Adjustment Procedures, Notification and Consultation Process

If any modification or adjustment is made to the calculation of the Strategy under the Rules, the Strategy Sponsor will make such modifications or adjustments based on market conditions and other relevant factors, as in the judgment of the Strategy Sponsor, are necessary to ensure that the Strategy continues to reflect, as closely as possible, the underlying economic interest it is designed to represent.

Wherever practicable, any adjustments to the calculation of the Strategy, other than a pre-determined rebalancing, will be announced to the relevant interested parties or investors. Such announcement will be made in a timely fashion and, when reasonably possible, prior to the date in which the changes are due to become effective.

If the Strategy Sponsor determines in its discretion that a consultation with the relevant interested parties or investors is appropriate, it will inform them of the procedures applicable to the consultation.

Errors

The Strategy Sponsor reserves the right to make adjustments to the Strategy Level to correct any erroneous calculation or publication of the Strategy Level. The Strategy Sponsor will determine whether such error requires a change in the composition or calculation of the Strategy and, if so, the procedures outlined above will apply.