

# Wealth Management Perspectives



# Lending in Action

## Examples on how to potentially use a Securities Based Loan

### BUYING A VACATION HOME

#### Situation

- Sarah and Michael found their dream vacation home.
- There are several bidders on the property. Closing quickly will enable them to present an attractive offer.
- Home Price: \$650,000



#### Solution

- Use their securities based loan to make an all-cash offer.
- Separately, apply for longer-term residential mortgage financing from Morgan Stanley Private Bank, National Association once they settle in.\*
- Consider using the securities based loan again to fund home improvements and furnishings for their new home.

### FUNDING A BUSINESS

#### Situation

- Jose and Susanna are looking for simple and cost-effective financing options to help their son, Zachary, grow his small business.
- General Financing Needs: \$200,000



#### Solution

If qualified, Jose and Susanna could pledge eligible securities in their brokerage account as collateral to establish a securities based loan in Zachary's name.

- Repay a small business loan with a fixed rate advance at a competitive rate.
- Use the variable rate advance portion of the loan as needed to help fund other business expenses, such as upcoming tax payments and equipment needs.

Borrowing against securities may not be appropriate for everyone. You should be aware that there are risks associated with a securities based loan, including possible maintenance calls on short notice, and that market conditions can magnify any potential for loss. For details please see the important disclosures below and at the end of the document. The lending products referenced are separate and distinct, and are not connected in any way. The ability to qualify for one product is not connected to an individual's eligibility for another.

\*There may be additional restrictions based on properties located in the state of Texas. If the property is located in the state of Texas, please reach out to your mortgage consultant for additional details. The information provided herein is not intended to address any particular matter and may not apply depending on the context, as all clients' circumstances are unique. The strategies discussed in this material are meant for clients with a specific need and may not be appropriate for all clients. No legal, tax or other advice is being offered herein. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

# Financing Options to Help Fund Your Business's Growth

When your business is applying for a loan, consider your options

|                                    | Traditional Business Term Loan  | Morgan Stanley Securities Based Loan <sup>1</sup>                |
|------------------------------------|---|--|
| <b>Fees</b>                        | Origination, application, underwriting, documentation, appraisal, etc.        | Typically None <sup>2</sup>                                      |
| <b>Financial Statements</b>        | 3 years business and personal   | Typically None for loans < \$10MM                                |
| <b>Ongoing Financial Reporting</b> | Annual and/or quarterly business and personal                                 | Typically None   |
| <b>Financial Covenants</b>         | Debt service coverage, liquidity, leverage, etc.                              | Typically None <sup>3</sup>                                      |
| <b>Collateral</b>                  | Business assets   | Eligible Securities in Business or Personal securities Portfolio |
| <b>Closing Time</b>                | Typically 30+ days  | Typically 3 – 5 days   |
| <b>Term/Maturity</b>               | 3 – 7 years for equipment or working capital;<br>5 – 10 years for real estate | Demand Loan; No Set Maturity                                     |
| <b>Payment</b>                     | Principal + Interest  | Interest Only Available or other Flexible Payment Structures     |
| <b>Rate</b>                        | Fixed   | Variable or Fixed  |

Borrowing against securities may not be appropriate for everyone. You should be aware that there are risks associated with a securities based loan, including possible maintenance calls on short notice, and that market conditions can magnify any potential for loss. For details please see the important disclosures below and at the end of the document.

1. Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A. as lender 2. Clients may be responsible for the fees of a third party law firm engaged to review complex transactions (e.g., review of trust agreements). Clients may also be charged a fee for the issuance of a letter of credit, for prepayment of principal on fixed rate advances, and upon a client's request for certain cash management services (e.g., duplicate statement or check re-order) 3. Clients must maintain sufficient collateral

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

# Access Funds to Support the Growth of Your Business

## Financing Business Expenses With a Securities Based Loan

### Pay for business expenses with the potential to maintain your investment strategy

Potentially save on borrowing costs with a competitive rate

Application process may be faster than traditional business loans and, once approved, you can access funds within days—via check, wire or online



Finance a variety of needs—such as capital improvements, acquisitions and hiring

Potentially set up securities based loan in business' name

Interest may be tax deductible when used for business expenses

**Borrowing against securities may not be appropriate for everyone. You should be aware that there are risks associated with a securities based loan, including possible maintenance calls on short notice, and that market conditions can magnify any potential for loss. For details please see the important disclosures below and at the end of the document**

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

# Cash Management Solutions at-a-Glance

Through Morgan Stanley you can access a full suite of solutions to help you manage your everyday finances

## DIGITAL TOOLS



Morgan Stanley Online & Mobile App<sup>1</sup>



eAuthorizations



Cash Management Alerts



Online Payments (Bill Pay)



Spending and Budgeting

## MONEY MOVEMENT



Direct Deposit



Mobile Deposit



Send Money with Zelle<sup>®</sup>



Transfers



Unlimited Check Writing

## MORGAN STANLEY CARDS



The Morgan Stanley Debit Cards with Price Protection from Mastercard<sup>2</sup> & ATM Rebates Worldwide



The Morgan Stanley Credit Card from American Express<sup>®</sup>



The Platinum Card from American Express<sup>®</sup> Exclusively for Morgan Stanley

## SAVINGS



Preferred Savings Program



Bank Deposit Program



Access to FDIC Coverage<sup>4</sup>

<sup>1</sup> The Morgan Stanley Mobile App is currently available for iPhone<sup>®</sup> and iPad<sup>®</sup> from the App Store<sup>SM</sup> and Android<sup>™</sup> on Google Play<sup>™</sup>. Standard messaging and data rates from your provider may apply. Apple<sup>®</sup>, the Apple logo, iPhone<sup>®</sup>, iPad<sup>®</sup>, and iPad Air<sup>®</sup> are trademarks of Apple Inc., registered in the US and other countries. Apple Pay<sup>™</sup> and iPad mini<sup>™</sup> are trademarks of Apple Inc. App Store is a service mark of Apple Inc. Subject to device connectivity.

<sup>2</sup> Certain terms, conditions, restrictions and exclusions apply. Please refer to the Morgan Stanley Debit Card Terms and Conditions at [morganstanley.com/debitcardterms](http://morganstanley.com/debitcardterms) for additional information. 3 Reserved and CashPlus clients are eligible for unlimited global ATM fee rebates. All other clients are eligible for up to \$200 in annual global ATM fee rebates.

<sup>4</sup> Eligible deposits are FDIC-insured up to applicable limits and are available to eligible clients with deposits held at Morgan Stanley Bank, N.A. ("MSBNA") or Morgan Stanley Private Bank, National Association ("MSPBNA").

The Morgan Stanley Cards from American Express are issued by American Express National Bank, not Morgan Stanley Smith Barney LLC. Services and rewards for the Cards are provided by Morgan Stanley Smith Barney LLC, American Express, or other third parties. Restrictions and other limitations apply. See the terms and conditions for the Cards for details. Clients are urged to review fully before applying. Morgan Stanley, its affiliates, and Morgan Stanley Financial Advisors and employees are not in the business of providing tax or legal advice. Clients should speak with their tax advisor regarding the potential tax implications of the Rewards Program upon their specific circumstances.

# Freedom to Access Your Account When and Where You Want

Our Digital Tools Are Available to Help You Conveniently Manage Your Daily Finances, Accessible via Morgan Stanley Online and the Mobile App



## **ONLINE PAYMENTS (BILL PAY)**

Conveniently pay your bills on Morgan Stanley Online or the Morgan Stanley Mobile App. Receive eBills, schedule one-time or recurring payments and track the status of your payments for greater financial control.



## **SPENDING AND BUDGETING**

Manage your cash flow across all of your accounts at Morgan Stanley and those held at outside financial institutions. Allow your Financial Advisor to view your spending patterns to see how your short-term spending impacts the progress toward your long-term financial goals.



## **EAUTHORIZATIONS FOR TRANSACTIONS**

Electronically approve wire transactions and transfers between your Morgan Stanley accounts directly via Morgan Stanley Online or the Mobile App. With eAuthorizations, you no longer need to sign a paper Letter of Authorization (LOA) to authorize a transfer request.



## **CASH MANAGEMENT ALERTS**

Stay up-to-date on your account and debit card activity with Cash Management Alerts. Sign up to manage your available cash balance debit cards, monitor foreign and online transactions and receive customizable alerts.

# More Ways to Access and Move Your Money

Explore our various solutions to help you easily complete transactions and transfer your funds



## **DIRECT DEPOSITS**

Deposit your paycheck, Social Security benefit or other recurring funds automatically into your account.

## **MOBILE DEPOSITS**

Scan and deposit checks drawn on U.S.-based banks anytime, anywhere with the Morgan Stanley Mobile App. View a copy of your deposit online or on the Mobile App. This capability offers high deposit amounts.



## **SEND MONEY WITH ZELLE®**

Available on the Morgan Stanley Mobile App and Morgan Stanley Online, Send Money with Zelle® allows you to send and receive money with friends, family and people you know and trust with an eligible account in the U.S. There are no fees to Morgan Stanley clients for sending or receiving money using Send Money with Zelle®.



## **TRANSFERS**

Use Morgan Stanley Online, the Morgan Stanley Mobile App or call your Financial Advisor to transfer funds instantly between multiple Morgan Stanley accounts, as well as to and from external financial institutions linked to your account.



## **UNLIMITED CHECK WRITING**

Activity reporting displays check payee names on your statements, on Morgan Stanley Online or the Morgan Stanley Mobile App. Check images can be viewed on Morgan Stanley Online and the Morgan Stanley Mobile App.

# The Morgan Stanley Debit Cards

Any ATM is your ATM, with ATM rebates worldwide<sup>1</sup>

## THE MORGAN STANLEY DEBIT CARDS

Make purchases and access cash at more than 2 million ATMs worldwide that display the Mastercard®, Maestro® and STAR® Network logos. Get ATM rebates worldwide. Security features include 24-hour fraud monitoring, cash management alerts, \$0 liability\* on unauthorized purchases and temporary card lock and unlock if you misplace your card.

\* Certain terms, conditions, restrictions and exclusions apply. Please refer to the Morgan Stanley Debit Card Terms and Conditions at [morganstanley.com/debitcardterms](https://www.morganstanley.com/debitcardterms) for additional information.

Visit <https://www.morganstanley.com/debitcards>



<sup>1</sup> Reserved and CashPlus clients are eligible for unlimited global ATM fee rebates. All other clients are eligible for up to \$200 in annual global ATM fee rebates.



# Enhanced Protection from Mastercard

Enjoy additional protections offered through Mastercard® on purchases made with your Morgan Stanley Debit Card



#### PRICE PROTECTION\*

Should you find a lower price for a new item within 120 days from the date of purchase, you may be reimbursed for the price difference.



#### EXTENDED WARRANTY\*

May extend the terms of the manufacturer's warranty for up to 24 months on most purchases.



#### SATISFACTION GUARANTEE\*

If you become dissatisfied with a product within 60 days of purchase, and the store will not accept a return, you may be eligible for a refund of up to \$250.



#### PURCHASE ASSURANCE\*

Provides coverage for most items you purchase if the item is damaged or stolen within 90 days of the date of purchase.

#### YOUR MORGAN STANLEY DEBIT CARD ALSO OFFERS:

MasterTrip® Travel Assistance Services,\* MasterRental Coverage,\* Travel Services Medical Assistance,\* MasterLegal® Referral Service\* and Master RoadAssist® Service\*

\*Certain terms, conditions, restrictions and exclusions apply. Please refer to the Morgan Stanley Debit Card Terms and Conditions at <http://www.morganstanley.com/debitcardterms> for additional information.

# The Platinum Card from American Express Exclusively For Morgan Stanley

**\$695 Annual Engagement Bonus for eligible Platinum CashPlus Account Holders. Certain Debit Card Holders may also qualify.<sup>1</sup>**

## EXCLUSIVE FOR MORGAN STANLEY CARD MEMBERS

Additional Platinum Card, a \$175 value, to your account for no annual fee – an exclusive benefit to clients of Morgan Stanley.<sup>2</sup>

Annual Fee: \$695<sup>3</sup>



To learn more about the Membership Rewards® program and unique features and benefits designed exclusively for Morgan Stanley clients, visit [www.americanexpress.com/mscards](https://www.americanexpress.com/mscards).

<sup>1</sup> Platinum CashPlus clients are eligible for the Annual Engagement Bonus (the “Bonus”) if they 1) are the Basic Card Member (primary account holder) of the Platinum Card® from American Express Exclusively for Morgan Stanley (the “Card”); or 2) spend at least \$100,000 during the calendar year across Morgan Stanley Debit Cards associated with Platinum CashPlus Accounts in their ALG (the “Debit Card Use Threshold”).

Basic Card Members who apply for, and are approved for, the Card on or after July 1, 2021 will be eligible to receive a Bonus of \$695. Basic Card Members with Card Account opening anniversary months taking place through December 31, 2021 will be eligible to receive a Bonus of \$550. Effective January 1, 2022, all Basic Card Members will be eligible for the \$695 Bonus, which will be paid starting February 1, 2022. Clients who qualify for the Bonus by meeting the Debit Card Use Threshold are eligible to receive the \$695 Bonus, which is typically paid in January of the following calendar year.

Each ALG is eligible for one bonus per calendar year. Each client is only eligible for one bonus per calendar year. For more information, please refer to the CashPlus Account Disclosure Statement at <https://www.morganstanley.com/wealth-disclosures/cashplusaccountdisclosurestatement.pdf>.

<sup>2</sup> Obtain one (1) Additional Platinum Card for no additional annual fee. You can get up to the next three (3) Additional Platinum Cards for a total annual fee of \$175. Then, each Additional Platinum Card can be obtained for an annual fee of \$175. There is no annual fee for Additional Gold Cards. Additional Card Members must be at least 13 years of age and never have had a defaulted account with American Express.

<sup>3</sup> Annual Fee: The annual fee for the Platinum Card® from American Express Exclusively for Morgan Stanley is \$695. APRs: The following APR will vary with the market based on Prime Rate. APR for Cash Advances: 25.24% Variable rates are accurate as of 06/4/2021. Other Charges: Cash Advance Fee: Either \$10 or 5% of the amount of each cash advance, whichever is greater. Foreign Transaction Fee: None. For current APRs & Fees, see the Terms & Conditions section on the application.

---

# Morgan Stanley Active Assets Account and CashPlus Brokerage Accounts

You can take advantage of the breadth of cash management services provided by Morgan Stanley with either an Active Assets Account or CashPlus Account

## ACTIVE ASSETS ACCOUNT

Designed to provide an integrated solution to help you manage your investments alongside your cash management. The Active Assets Account allows you to access most of the cash management services we have to offer. With the Active Assets Account, your cash can be held with your long-term investments in one account. If you prefer to keep your investment activities separate from your daily finances, you can open multiple accounts to divide your securities from your cash.

## MORGAN STANLEY CASHPLUS ACCOUNTS

Morgan Stanley CashPlus brokerage account is designed for your cash needs as a modern alternative to banking, providing more value, more protection and a seamless digital experience. With a Morgan Stanley CashPlus Account you can avoid monthly account fees<sup>1</sup> by meeting certain fee avoidance criteria. You can benefit from unlimited ATM fee rebates worldwide, complimentary Identity and Credit Protection from Experian®, Insufficient Funds Coverage<sup>2</sup> plus more. Choose between a Premier or Platinum Morgan Stanley CashPlus Account depending on your cash management needs.

<sup>1</sup> A monthly account fee will be charged but can be avoided if you meet certain criteria. Third party cash management fees may apply.

<sup>2</sup> There is no cost for this feature; however, interest charges may apply if funds are transferred from available margin in your Active Assets Account (AAA) or from your Liquidity Access Line (LAL). (LAL terms and conditions apply.)

The Active Assets Account is a brokerage account offered through Morgan Stanley Smith Barney LLC. Under the Bank Deposit Program, generally cash balances held in an account(s) at Morgan Stanley Smith Barney LLC are automatically deposited into an interest-bearing FDIC-insured deposit account(s) at Morgan Stanley Bank, N.A. and/or Morgan Stanley Private Bank, National Association, each a national bank, member FDIC, and an affiliate of Morgan Stanley Smith Barney LLC. Detailed information on federal deposit insurance coverage is available on the FDIC's website (<https://www.fdic.gov/deposit/deposits/>).

The CashPlus Account is a brokerage account offered through Morgan Stanley Smith Barney LLC. Conditions and restrictions apply. Please refer to the CashPlus Account Disclosure Statement at <https://www.morganstanley.com/wealthdisclosures/cashplusaccountdisclosurestatement.pdf>.

# Morgan Stanley CashPlus: A Modern Alternative to Banking

With a CashPlus brokerage account, exclusively for Morgan Stanley clients, you can manage your cash and get more value, more protection, and a seamless digital experience.



## No Cash Management Fees<sup>1</sup>, Exceptional Access and Value

- Unlimited ATM fee rebates worldwide
- Unlimited check writing
- No foreign transaction fees
- No cash advance fees<sup>2</sup>
- Cash access from banks or tellers that accept Mastercard



## Comprehensive Protection

- Exclusive Identity and Credit Protection from Experian<sup>®</sup>
- Insufficient Funds Coverage<sup>3</sup>
- Enhanced benefits from Mastercard, including Extended Warranty\*, Satisfaction Guarantee\*, and Price Protection\*, with the Morgan Stanley Debit Card
- SIPC and FDIC coverage



## Seamless Digital Experience

- Enhanced display of cash activities
- Suite of self-service capabilities, including:
  - Debit card lock and unlock
  - Setting alerts
  - Bill pay
  - Easy money movement
  - eAuthorization
  - Tools to transfer and manage cash

Best of all, you and your family may be able to avoid monthly account fees by meeting certain deposit and other qualifying criteria<sup>†</sup> across all of your CashPlus accounts sharing the same mailing address.

### Additionally, Exclusively for Platinum CashPlus Clients:

Enjoy a \$695 Annual Engagement Bonus<sup>4</sup> if you have The Platinum Card<sup>®</sup> from American Express Exclusively for Morgan Stanley. Certain Morgan Stanley Debit Cardholders may also qualify.

\* Certain terms, conditions, restrictions and exclusions apply. Please refer to the Morgan Stanley Debit Card Terms and Conditions at [www.morganstanley.com/debitcardterms](http://www.morganstanley.com/debitcardterms) for additional information.

<sup>1</sup> A monthly account fee will be charged but can be avoided if you meet certain criteria. Third party cash management fees may apply.

<sup>2</sup> While Morgan Stanley does not charge for this service, some banks may charge a fee that is either a fixed amount or a percentage of the withdrawal.

<sup>3</sup> There is no cost for this feature; however, interest charges may apply if funds are transferred from available margin in your Active Assets Account (AAA) or from your Liquidity Access Line (LAL). (LAL terms and conditions apply.)

<sup>4</sup> Platinum CashPlus clients are eligible for the Annual Engagement Bonus (the "Bonus") if they 1) are the Basic Card Member (primary account holder) of the Platinum Card<sup>®</sup> from American Express Exclusively for Morgan Stanley (the "Card"); or 2) spend at least \$100,000 during the calendar year across Morgan Stanley Debit Cards associated with Platinum CashPlus Accounts in their ALG (the "Debit Card Use Threshold").

Basic Card Members who apply for, and are approved for, the Card on or after July 1, 2021 will be eligible to receive a Bonus of \$695. Basic Card Members with Card Account opening anniversary months taking place through December 31, 2021 will be eligible to receive a Bonus of \$550. Effective January 1, 2022, all Basic Card Members will be eligible for the \$695 Bonus, which will be paid starting February 1, 2022. Clients who qualify for the Bonus by meeting the Debit Card Use Threshold are eligible to receive the \$695 Bonus, which is typically paid in January of the following calendar year.

Each ALG is eligible for one bonus per calendar year. Each client is only eligible for one bonus per calendar year. For more information, please refer to the CashPlus Account Disclosure Statement at <https://www.morganstanley.com/wealth-disclosures/cashplusaccountdisclosurestatement.pdf>.

# CashPlus Brokerage Account vs. Active Assets Account

Which account is right for you? Review the table below highlighting some of the key differences between a CashPlus Brokerage Account and an Active Assets Account to help you decide.

|  | ACTIVE ASSETS ACCOUNT                 | PREMIER CASHPLUS  | PLATINUM CASHPLUS                  |
|--|---------------------------------------|---|------------------------------------|
| Debit Cards & Checks   | ✓                                     | ✓   | ✓                                  |
| Unlimited ATM Fee Rebates Worldwide  | ✓                                     | Unlimited   | Unlimited                          |
| No foreign transaction fees and no cash advance fees <sup>1</sup>                                    | X                                     | ✓   | ✓                                  |
| \$695 Annual Engagement Bonus <sup>2</sup>   | X                                     | X   | ✓                                  |
| Insufficient Funds Coverage <sup>3</sup>   | X                                     | ✓   | ✓                                  |
| Identity and Credit Protection from Experian®<br>Experian enrollees must be a CashPlus account owner | X                                     | Up to 2 enrollees<br>Experian enrollees must be a CashPlus account holder | Up to 4 enrollees                  |
| Online Money Movement, ACH Transactions, Online Bill Pay, Global Currency                            | ✓                                     | ✓   | ✓                                  |
| Margin, Options, Short Sales, Pledging as collateral   | ✓                                     | X   | X                                  |
| Account Fees   | Annual \$175 or \$150 with eDelivery* | \$15 monthly if criteria not met  | \$45 monthly if criteria not met** |

**For the full chart with a detailed comparison of AAA and CashPlus contact your Morgan Stanley Team.**

\*For Reserved Clients: No AAA account fees

\*\* Monthly account fee of \$45. Effective 02/01/2022, \$55 per month.

<sup>1</sup> While Morgan Stanley does not charge for this service, some banks may charge a fee that is either a fixed amount or a percentage of the withdrawal.

<sup>2</sup> There is no cost for this feature; however, interest charges may apply if funds are transferred from available margin in your Active Assets Account (AAA) or from your Liquidity Access Line (LAL). (LAL terms and conditions apply)

<sup>3</sup> Platinum CashPlus clients are eligible for the Annual Engagement Bonus (the "Bonus") if they 1) are the Basic Card Member (primary account holder) of the Platinum Card® from American Express Exclusively for Morgan Stanley (the "Card"); or 2) spend at least \$100,000 during the calendar year across Morgan Stanley Debit Cards associated with Platinum CashPlus Accounts in their ALG (the "Debit Card Use Threshold").

Basic Card Members who apply for, and are approved for, the Card on or after July 1, 2021 will be eligible to receive a Bonus of \$695. Basic Card Members with Card Account opening anniversary months taking place through December 31, 2021 will be eligible to receive a Bonus of \$550. Effective January 1, 2022, all Basic Card Members will be eligible for the \$695 Bonus, which will be paid starting February 1, 2022. Clients who qualify for the Bonus by meeting the Debit Card Use Threshold are eligible to receive the \$695 Bonus, which is typically paid in January of the following calendar year.

Each ALG is eligible for one bonus per calendar year. Each client is only eligible for one bonus per calendar year. For more information, please refer to the CashPlus Account Disclosure Statement at <https://www.morganstanley.com/wealth-disclosures/cashplusaccountdisclosurestatement.pdf>.

# Make the Most of Your Cash

Make the most of your cash reserves with the peace of mind that comes with FDIC coverage



## PREFERRED SAVINGS PROGRAM

Consolidate your cash or rebalance your portfolio at a competitive rate with our Preferred Savings Program. With same day availability, it provides convenient access to your cash reserves within your investment portfolio. Your deposits are FDIC insured up to applicable limits



## BANK DEPOSIT PROGRAM

Idle cash balances in your Active Assets Account or Morgan Stanley CashPlus Account (including deposits, dividends, interest and investment sales proceeds) are automatically swept each night through the Bank Deposit Program into the interest-bearing FDIC insured deposit accounts and/or a money market mutual fund. These cash balances remain a component of your cash available to invest or spend. FDIC insured up to applicable limits.



## FDIC COVERAGE

Eligible deposits are FDIC-insured up to applicable limits and are available to eligible clients with deposits held at Morgan Stanley Bank, N.A. ("MSBNA") or Morgan Stanley Private Bank, National Association ("MSPBNA").

Under the Preferred Savings program ("Preferred Savings"), Morgan Stanley Smith Barney LLC makes available interest-bearing FDIC-insured deposit account(s) at Morgan Stanley Private Bank, National Association, a national bank, Member FDIC, and an affiliate of Morgan Stanley Smith Barney LLC. Deposits placed in Preferred Savings are eligible for FDIC insurance up to \$250,000 (including principal and interest) per depositor for all deposits held in the same insurable capacity (the Maximum Applicable Deposit Insurance Amount). All deposits held in the same insurable capacity will be aggregated for purposes of the Maximum Applicable Deposit Insurance Amount, including deposits maintained through the Bank Deposit Program. The client is responsible for monitoring the total amount held with the bank. The bank also reserves the right to offer promotional rates from time to time. Detailed information on federal deposit insurance coverage is available on the FDIC's website (<https://www.fdic.gov/deposit/deposits/>). **The Preferred Savings program is not intended for clients who need to have frequent access to funds and those funds will not be automatically accessed to reduce a debit or margin loan in your brokerage account. Withdrawals from an account in Preferred Savings are limited to 10 transactions per calendar month, and any withdrawal or transfer over the limit in any one calendar month will be subject to an excess withdrawal fee.**

Under the Bank Deposit Program, cash balances held in account(s) at Morgan Stanley Smith Barney LLC are automatically deposited into an interest-bearing FDIC-insured deposit account(s) at Morgan Stanley Bank, N.A., and/or Morgan Stanley Private Bank, National Association, each a national bank, Member FDIC, and an affiliate of Morgan Stanley Smith Barney LLC. Detailed information on federal deposit insurance coverage is available on the FDIC's website (<https://www.fdic.gov/deposit/deposits/>). Cash balances generally include the uninvested cash in a client's account(s) minus certain items such as purchase transactions due to settle within a specified time period, other charges to a client's account(s), and cash balances that are designated as collateral for a client's obligations.

Federal Deposit Insurance Corporation ("FDIC") — Cash balances swept into deposit accounts at participating banks in the Bank Deposit Program are protected by FDIC Insurance up to applicable FDIC limits. FDIC insurance is a federal government program administered by the Federal Deposit Insurance Corporation. This insurance covers bank deposits held in checking accounts, savings accounts, certificates of deposits and money market deposits (not money market funds). This insurance comes into play in the event of a bank failure and covers client cash up to a total of \$250,000 per bank, for each "insurable capacity" (e.g. each individual, joint, etc.). It does not cover investment products that are not deposits, such as mutual funds, annuities, life insurance policies, stocks or bonds. Refer to <https://www.fdic.gov> for additional details.

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States.

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance. Morgan Stanley Smith Barney LLC offers investment program services through a variety of investment programs, which are opened pursuant to written client agreements. Each program offers investment managers, funds and features that are not available in other programs; conversely, some investment managers, funds or investment strategies may be available in more than one program.

Morgan Stanley's investment advisory programs may require a minimum asset level and, depending on your specific investment objectives and financial position, may not be appropriate for you. Please see the Morgan Stanley Smith Barney LLC program disclosure brochure (the "Morgan Stanley ADV") for more information in the investment advisory programs available. The Morgan Stanley ADV is available at [www.morganstanley.com/ADV](http://www.morganstanley.com/ADV). **Sources of Data.** Information in this material in this report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness or timeliness. Third-party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data. All opinions included in this material constitute the Firm's judgment as of the date of this material and are subject to change without notice. This material was not prepared by the research departments of Morgan Stanley & Co. LLC or Morgan Stanley Smith Barney LLC. Some historical figures may be revised due to newly identified programs, firm restatements, etc.

**Global Investment Manager Analysis (GIMA) Focus List, Approved List and Tactical Opportunities List; Watch Policy.** GIMA uses two methods to evaluate investment products in applicable advisory programs: **Focus** (and investment products meeting this standard are described as being on the Focus List) and **Approved** (and investment products meeting this standard are described as being on the Approved List). In general, Focus entails a more thorough evaluation of an investment product than Approved. Sometimes an investment product may be evaluated using the Focus List process but then placed on the Approved List instead of the Focus List. Investment products may move from the Focus List to the Approved List, or vice versa. GIMA may also determine that an investment product no longer meets the criteria under either process and will no longer be recommended in investment advisory programs (in which case the investment product is given a "Not Approved" status). GIMA has a "Watch" policy and may describe a Focus List or Approved List investment product as being on "Watch" if GIMA identifies specific areas that (a) merit further evaluation by GIMA and (b) may, but are not certain to, result in the investment product becoming "Not Approved." The Watch period depends on the length of time needed for GIMA to conduct its evaluation and for the investment manager or fund to address any concerns. Certain investment products on either the Focus List or Approved List may also be recommended for the **Tactical Opportunities List** based in part on tactical opportunities existing at a given time. The investment products on the Tactical Opportunities List change over time. For more information on the Focus List, Approved List, Tactical Opportunities List and Watch processes, please see the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management. Your Financial Advisor or Private Wealth Advisor can also provide upon request a copy of a publication entitled "Manager Selection Process."

The **Global Investment Committee** is a group of seasoned investment professionals who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend model portfolio weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

The GIC Asset Allocation Models are not available to be directly implemented as part of an investment advisory service and should not be regarded as a recommendation of any Morgan Stanley investment advisory service. The GIC Asset Allocation Models do not represent actual trading or any type of account or any type of investment strategies and none of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, advisory fees, fund expenses) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models which, when compounded over a period of years, would decrease returns.

**Adverse Active AlphaSM 2.0** is a patented screening and scoring process designed to help identify high-quality equity and fixed income managers with characteristics that may lead to future outperformance relative to index and peers. While highly ranked managers performed well as a group in our Adverse Active Alpha model back tests, not all of the managers will outperform. Please note that this data may be derived from back-testing, which has the benefit of hindsight. In addition, highly ranked managers can have differing risk profiles that might not be appropriate for all investors.

Our view is that Adverse Active Alpha is a good starting point and should be used in conjunction with other information. Morgan Stanley Wealth Management's qualitative and quantitative investment manager due diligence process are equally important factors for investors when considering managers for use through an investment advisory program. Factors including, but not limited to, manager

turnover and changes to investment process can partially or fully negate a positive Adverse Active Alpha ranking. Additionally, highly ranked managers can have differing risk profiles that might not be appropriate for all investors.

The proprietary **Value Score** methodology considers an active investment strategies' value proposition relative to its costs. From a historical quantitative study of several quantitative markers, Value Score measures perceived forward-looking benefit and computes (1) "fair value" expense ratios for most traditional investment managers across 40 categories and (2) managers' perceived "excess value" by comparing the fair value expense ratios to actual expense ratios. Managers are then ranked within each category by their excess value to assign a Value Score. Our analysis suggests that greater levels of excess value have historically corresponded to attractive subsequent performance.

For more information on the ranking models, please see Adverse Active AlphaSM 2.0: Scoring Active Managers According to Potential Alpha and Value Score: Scoring Fee Efficiency by Comparing Managers' "Fair Value" and Actual Expense Ratios. The whitepapers are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

Additionally, highly ranked managers can have differing risk profiles that might not be appropriate for all investors. For more information on AAA, please see the Adverse Active Alpha Ranking Model and Selecting Managers with Adverse Active Alpha whitepapers. The whitepaper are available from your Financial Advisor or Private Wealth Advisor. ADVERSE ACTIVE ALPHA is a registered service mark of Morgan Stanley and/or its affiliates. U.S. Pat. No. 8,756,098 applies to the Adverse Active Alpha system and/or methodology.

**The Global Investment Manager Analysis (GIMA) Services Only Apply to Certain Investment Advisory Programs** GIMA evaluates certain investment products for the purposes of some – but not all – of Morgan Stanley Smith Barney LLC's investment advisory programs (as described in more detail in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management). If you do not invest through one of these investment advisory programs, Morgan Stanley Wealth Management is not obligated to provide you notice of any GIMA Status changes even though it may give notice to clients in other programs.

**Strategy May Be Available as a Separately Managed Account or Mutual Fund** Strategies are sometimes available in Morgan Stanley Wealth Management investment advisory programs both in the form of a separately managed account ("SMA") and a mutual fund. These may have different expenses and investment minimums. Your Financial Advisor or Private Wealth Advisor can provide more information on whether any particular strategy is available in more than one form in a particular investment advisory program. Generally, investment advisory accounts are subject to an annual asset-based fee which is payable monthly in advance (some account types may be billed differently). (The "Fee"). In general, the Fee covers Morgan Stanley investment advisory services, custody of securities with Morgan Stanley, trade execution with or through Morgan Stanley or its affiliates, as well as compensation to any Morgan Stanley Financial Advisor.

In addition, each account that is invested in a program that is eligible to purchase certain investment products, such as mutual funds, will also pay a Platform Fee (which is subject to a Platform Fee offset) as described in the applicable ADV brochure. Accounts invested in the Select UMA program will also pay a separate Morgan Stanley Overlay Manager Fee and any applicable Sub-Manager fees. If your account is invested in mutual funds or exchange traded funds (collectively "funds"), you will pay the fees and expenses of any funds in which your account is invested. Fees and expenses are charged directly to the pool of assets the fund invests in and are reflected in each fund's share price. These fees and expenses are an additional cost to you and would not be included in the Fee amount in your account statements. Overlay Managers or Executing Sub-Managers ("managers") in some of Morgan Stanley's Separately Managed Account ("SMA") programs may affect transactions through broker-dealers other than Morgan Stanley or our affiliates. If your manager trades with another firm, you may be assessed costs by the other firm in addition to Morgan Stanley's fees. Those costs will be included in the net price of the security, not separately reported on trade confirmations or account statements. Certain managers have historically directed most, if not all, of their trades to outside firms. Information provided by managers concerning trade execution away from Morgan Stanley is summarized at: [www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf](http://www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf). For more information, please refer to the ADV Brochure for your program(s), available at [www.morganstanley.com/ADV](http://www.morganstanley.com/ADV) or contact your Financial Advisor/Private Wealth Advisor. For example, on an advisory account with a 2.5% annual fee, if the gross annual performance is 6.00%, the compounding effect of the fees will result in a net performance of approximately 3.38% after one year, 10.50% after three years, and 18.10% after five years. **Conflicts of Interest:** GIMA's goal is to provide professional, objective evaluations in support of the Morgan Stanley Wealth Management investment advisory programs. We have policies and procedures to help us meet this goal. However, our business is subject to various conflicts of interest. For example, ideas and suggestions for which investment products should be evaluated by GIMA come from a variety of sources, including our Morgan Stanley Wealth Management Financial Advisors and their direct or indirect managers, and other business persons within Morgan Stanley Wealth Management or its affiliates. Such persons may have an ongoing business relationship with certain investment managers or mutual fund companies whereby they, Morgan Stanley Wealth Management or its affiliates receive compensation from, or otherwise related to, those investment managers or mutual funds. For example, a Financial Advisor may suggest that GIMA evaluates an investment manager or fund in which a portion of his or her clients' assets are already invested. While such a recommendation is permissible, GIMA is responsible for the opinions expressed by GIMA. See the conflicts of interest section in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management for a discussion of other types of conflicts that may be relevant to GIMA's evaluation of managers and funds. In addition, Morgan Stanley Wealth Management, MS & Co., managers and their affiliates provide a variety of services



(including research, brokerage, asset management, trading, lending and investment banking services) for each other and for various clients, including issuers of securities that may be recommended for purchase or sale by clients or are otherwise held in client accounts, and managers in various advisory programs. Morgan Stanley Wealth Management, managers, MS & Co., and their affiliates receive compensation and fees in connection with these services. Morgan Stanley Wealth Management believes that the nature and range of clients to which such services are rendered is such that it would be inadvisable to exclude categorically all of these companies from an account.

Morgan Stanley charges each fund family we offer a mutual fund support fee, also called a “revenue-sharing payment,” on client account holdings in fund families according to a tiered rate that increases along with the management fee of the fund so that lower management fee funds pay lower rates than those with higher management fees.

**Consider Your Own Investment Needs:** The model portfolios and strategies discussed in the material are formulated based on general client characteristics including risk tolerance. This material is not intended to be an analysis of whether particular investments or strategies are appropriate for you or a recommendation, or an offer to participate in any investment. Therefore, clients should not use this material as the sole basis for investment decisions. They should consider all relevant information, including their existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. Such a determination may lead to asset allocation results that are materially different from the asset allocation shown in this profile. Talk to your Financial Advisor about what would be an appropriate asset allocation for you, whether CGCM is an appropriate program for you.

**No obligation to notify** – Morgan Stanley Wealth Management has no obligation to notify you when the model portfolios, strategies, or any other information, in this material changes.

**Please consider the investment objectives, risks, fees, and charges and expenses of mutual funds, ETFs, closed end funds, unit investment trusts, and variable insurance products carefully before investing. The prospectus contains this and other information about each fund. To obtain a prospectus, contact your Financial Advisor or Private Wealth Advisor or visit the Morgan Stanley website at [www.morganstanley.com](http://www.morganstanley.com). Please read it carefully before investing.**

**An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.**

The type of mutual funds and ETFs discussed in this presentation utilizes nontraditional or complex investment strategies and/or derivatives. Examples of these types of funds include those that utilize one or more of the below noted investment strategies or categories or which seek exposure to the following markets: (1) commodities (e.g., agricultural, energy and metals), currency, precious metals; (2) managed futures; (3) leveraged, inverse or inverse leveraged; (4) bear market, hedging, long-short equity, market neutral; (5) real estate; (6) volatility (seeking exposure to the CBOE VIX Index). Investors should keep in mind that while mutual funds and ETFs may, at times, utilize nontraditional investment options and strategies, they should not be equated with unregistered privately offered alternative investments. Because of regulatory limitations, mutual funds and ETFs that seek alternative-like investment exposure must utilize a more limited investment universe. As a result, investment returns and portfolio characteristics of alternative mutual funds and ETFs may vary from traditional hedge funds pursuing similar investment objectives. Moreover, traditional hedge funds have limited liquidity with long “lock-up” periods allowing them to pursue investment strategies without having to factor in the need to meet client redemptions and ETFs trade on an exchange. On the other hand, mutual funds typically must meet daily client redemptions. This differing liquidity profile can have a material impact on the investment returns generated by a mutual fund or ETF pursuing an alternative investing strategy compared with a traditional hedge fund pursuing the same strategy.

Nontraditional investment options and strategies are often employed by a portfolio manager to further a fund’s investment objective and to help offset market risks. However, these features may be complex, making it more difficult to understand the fund’s essential characteristics and risks, and how it will perform in different market environments and over various periods of time. They may also expose the fund to increased volatility and unanticipated risks particularly when used in complex combinations and/or accompanied by the use of borrowing or “leverage.”

The Morgan Stanley Digital Vault (“Digital Vault”) is accessible to clients with dedicated Financial Advisors. Documents shared via the Digital Vault should be limited to those relevant to your Morgan Stanley account relationship. Uploading a document to the Digital Vault does not obligate us to review or take any action on it, and we will not be liable for any failure to act upon the contents of such document. Please contact your Financial Advisor or Branch Management to discuss the appropriate process for providing the document to us for review. If you maintain a Trust or entity account with us, only our certification form will govern our obligations for such account. Please refer to the Morgan Stanley Digital Vault terms and conditions for more information.

Information related to your external accounts is provided for informational purposes only. It is provided by third parties, including the financial institutions where your external accounts are held. Morgan Stanley does not verify that the information is accurate and makes no representation or warranty as to its accuracy, timeliness, or completeness. Additional information about the features and services offered through Total Wealth View are available on the Total Wealth View site on Morgan Stanley Online and also in the Total Wealth View Terms and Conditions of Use.

Mobile check deposits are subject to certain terms and conditions. Checks must be drawn on a U.S. Bank.

Send Money with Zelle® is available on the Morgan Stanley Mobile App for iPhone and Android and on Morgan Stanley Online. Enrollment is required and dollar and frequency limits may apply. Domestic fund transfers must be made from an eligible account at Morgan Stanley Smith Barney LLC (Morgan Stanley) to a US-based account at another financial institution. Morgan Stanley maintains arrangements with JP Morgan Chase Bank, N.A. and UMB Bank, N.A. as NACHA-participating depository financial institutions for the processing of transfers on Zelle®. Data connection required, and message and data rates may apply, including those from your communications service provider. Must have an eligible account in the U.S. to use Zelle®. Transactions typically occur in minutes when the recipient's email address or U.S. mobile number is already enrolled with Zelle. See the Morgan Stanley Send Money with Zelle® terms for details.

Zelle and the Zelle related marks are wholly owned by Early Warning Services, LLC and are used herein under license. Morgan Stanley is not affiliated with Zelle®.

Electronic payments arrive to the payee within 1-2 business days, check payments arrive to the payee within 5 business days. Same-day and overnight payments are available for an additional fee within the available payment timeframes.

### KEY ASSET CLASS CONSIDERATIONS AND OTHER RISKS

Investing in the markets entails the risk of market volatility. The value of all types of investments, including stocks, mutual funds, exchange-traded funds ("ETFs"), closed-end funds, and unit investment trusts, may increase or decrease over varying time periods. To the extent the investments depicted herein represent **international securities**, you should be aware that there may be additional risks associated with international investing, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes, and differences in financial and accounting standards. These risks may be magnified in **emerging markets and frontier markets**. **Small- and mid-capitalization companies** may lack the financial resources, product diversification and competitive strengths of larger companies. In addition, the securities of small- and mid-capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies. The value of **fixed income securities** will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Bonds are subject to interest rate risk, call risk, reinvestment risk, liquidity risk, and credit risk of the issuer. **High yield bonds** are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues. In the case of **municipal bonds**, income is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax. **Treasury Inflation Protection Securities' (TIPS)** coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation. There is no guarantee that investors will receive par if TIPS are sold prior to maturity. The returns on a portfolio consisting primarily of **environmental, social, and governance-aware investments ("ESG")** may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client's account will be managed as described herein. **Options** and margin trading involve substantial risk and are not appropriate for all investors. Besides the general investment risk of holding securities that may decline in value and the possible loss of principal invested, **closed-end funds** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance and potential leverage. Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and once issued, shares of closed-end funds are sold in the open market through a stock exchange. Shares of closed-end funds frequently trade at a discount from their NAV which may increase investors' risk of loss. The risk of loss due to this discount may be greater for investors expecting to sell their shares in a relatively short period after completion of the public offering. This characteristic is a risk separate and distinct from the risk that a closed-end fund's net asset value may decrease as a result of investment activities. NAV is total assets less total liabilities divided by the number of shares outstanding. At the time an investor purchases or sells shares of a closed-end fund, shares may have a market price that is above or below NAV. Portfolios that invest a large percentage of assets in only one industry **sector** (or in only a few sectors) are more vulnerable to price fluctuation than those that diversify among a broad range of sectors.

**Alternative investments** often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to

concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; Risks associated with the operations, personnel, and processes of the manager; and Risks associated with cybersecurity. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by FINRA Rule 2241 or a "debt research report" as defined by FINRA Rule 2242 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. While the HFRI indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown). The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Individual funds have specific tax risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Wealth Management and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley Wealth Management or any of its affiliates, (3) are not guaranteed by Morgan Stanley Wealth Management and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Wealth Management is a registered broker-dealer, not a bank. This material is not to be reproduced or distributed to any other persons (other than professional advisors of the investors or prospective investors, as applicable, receiving this material) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public. Past performance is no guarantee of future results. Actual results may vary. SIPC insurance does not apply to precious metals, other commodities, or traditional alternative investments. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not appropriate for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund.

Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

A majority of Alternative Investment managers reviewed and selected by GIMA pay or cause to be paid an ongoing fee for distribution from their management fees to Morgan Stanley Wealth Management in connection with Morgan Stanley Wealth Management clients that purchase an interest in an Alternative Investment and in some instances pay these fees on the investments held by investments held by brokerage clients. Morgan Stanley Wealth Management has a conflict of interest in offering alternative investments because Morgan Stanley Wealth Management or our affiliates, in most instances, earn more money in your account from your investments in alternative investments than from other investment options.

It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper.

Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, “blow ups,” or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial “lift” or upwards bias.

**Hedge Funds of Funds** and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and delays in distributing important tax information. Categorically, hedge funds and funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns. An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a **target date portfolio** is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio is geared to investors who will retire and/or require income at an approximate year. The portfolio is managed to meet the investor’s goals by the pre-established year or “target date.” A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. **Managed futures** investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are appropriate only for the risk capital portion of an investor’s portfolio. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversified portfolio. Managed Futures are complex and not appropriate for all investors. **Rebalancing** does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy.

### Virtual Currency Products (Cryptocurrencies)

**Buying, selling, and transacting in Bitcoin, Ethereum or other digital assets (“Digital Assets”), and related funds and products, is highly speculative and may result in a loss of the entire investment. Risks and considerations include but are not limited to:**

- Digital Assets have only been in existence for a short period of time and historical trading prices for Digital Assets have been highly volatile. The price of Digital Assets could decline rapidly, and investors could lose their entire investment.
- Certain Digital Asset funds and products, allow investors to invest on a more frequent basis than investors may withdraw from the fund or product, and interests in such funds or products are generally not freely transferrable. This means that, particularly given the volatility of Digital Assets, an investor will have to bear any losses with respect to its investment for an extended period of time and will not be able to react to changes in the price of the Digital Asset once invested (for example, by seeking to withdraw) as quickly as when making the decision to invest. Such Digital Asset funds and products, are intended only for persons who are able to bear the economic risk of investment and who do not need liquidity with respect to their investments.
- Given the volatility in the price of Digital Assets, the net asset value of a fund or product that invests in such assets at the time an investor’s subscription for interests in the fund or product is accepted may be significantly below or above the net asset value of the product or fund at the time the investor submitted subscription materials.
- Certain Digital Assets are not intended to function as currencies but are intended to have other use cases. These other Digital Assets may be subject to some or all of the risks and considerations set forth herein, as well as additional risks applicable to such Digital Assets. Buyers, sellers and users of such Digital Assets should thoroughly familiarize themselves with such risks and considerations before transacting in such Digital Assets.
- The value of Digital Assets may be negatively impacted by future legal and regulatory developments, including but not limited to increased regulation of such Digital Assets. Any such developments

---

may make such Digital Assets less valuable, impose additional burdens and expenses on a fund or product investing in such assets or impact the ability of such a fund or product to continue to operate, which may materially decrease the value of an investment therein.

- Due to the new and evolving nature of digital currencies and the absence of comprehensive guidance, many significant aspects of the tax treatment of Digital Assets are uncertain. Prospective investors should consult their own tax advisors concerning the tax consequences to them of the purchase, ownership and disposition of Digital Assets, directly or indirectly through a fund or product, under U.S. federal income tax law, as well as the tax law of any relevant state, local or other jurisdiction.
- Over the past several years, certain Digital Asset exchanges have experienced failures or interruptions in service due to fraud, security breaches, operational problems or business failure. Such events in the future could impact any fund's or product's ability to transact in Digital Assets if the fund or product relies on an impacted exchange and may also materially decrease the price of Digital Assets, thereby impacting the value of your investment, regardless of whether the fund or product relies on such an impacted exchange.
- Although any Digital Asset product and its service providers have in place significant safeguards against loss, theft, destruction and inaccessibility, there is nonetheless a risk that some or all of a product's Digital Asset could be permanently lost, stolen, destroyed or inaccessible by virtue of, among other things, the loss or theft of the "private keys" necessary to access a product's Digital Asset.
- Investors in funds or products investing or transacting in Digital Assets may not benefit to the same extent (or at all) from "airdrops" with respect to, or "forks" in, a Digital Asset's blockchain, compared to investors who hold Digital Assets directly instead of through a fund or product. Additionally, a "fork" in the Digital Asset blockchain could materially decrease the price of such Digital Asset.
- Digital Assets are not legal tender, and are not backed by any government, corporation or other identified body, other than with respect to certain digital currencies that certain governments are or may be developing now or in the future. No law requires companies or individuals to accept digital currency as a form of payment (except, potentially, with respect to digital currencies developed by certain governments where such acceptance may be mandated). Instead, other than as described in the preceding sentences, Digital Asset products' use is limited to businesses and individuals that are willing to accept them. If no one were to accept digital currencies, virtual currency products would very likely become worthless.
- Platforms that buy and sell Digital Assets can be hacked, and some have failed. In addition, like the platforms themselves, digital wallets can be hacked, and are subject to theft and fraud. As a result, like other investors have, you can lose some or all of your holdings of Digital Assets.
- Unlike US banks and credit unions that provide certain guarantees of safety to depositors, there are no such safeguards provided to Digital Assets held in digital wallets by their providers or by regulators.
- Due to the anonymity Digital Assets offer, they have known use in illegal activity, including drug dealing, money laundering, human trafficking, sanction evasion and other forms of illegal commerce. Abuses could impact legitimate consumers and speculators; for instance, law enforcement agencies could shut down or restrict the use of platforms and exchanges, limiting or shutting off entirely the ability to use or trade Digital Asset products.
- Digital Assets may not have an established track record of credibility and trust. Further, any performance data relating to Digital Asset products may not be verifiable as pricing models are not uniform.
- Investors should be aware of the potentially increased risks of transacting in Digital Assets relating to the risks and considerations, including fraud, theft, and lack of legitimacy, and other aspects and qualities of Digital Assets, before transacting in such assets.
- The exchange rate of virtual currency products versus the USD historically has been very volatile and the exchange rate could drastically decline. For example, the exchange rate of certain Digital Assets versus the USD has in the past dropped more than 50% in a single day. Other Digital Assets may be affected by such volatility as well.
- Digital Asset exchanges have limited operating and performance histories and are not regulated with the same controls or customer protections available to more traditional exchanges transacting equity, debt, and other assets and securities. There is no assurance that a person/exchange who currently accepts a Digital Asset as payment will continue to do so in the future.

- The regulatory framework of Digital Assets is evolving, and in some cases is uncertain, and Digital Assets themselves may not be governed and protected by applicable securities regulators and securities laws, including, but not limited to, Securities Investor Protection Corporation coverage, or other regulatory regimes.

- Morgan Stanley Smith Barney LLC or its affiliates (collectively, "Morgan Stanley") may currently, or in the future, offer or invest in Digital Asset products, services or platforms. The proprietary interests of Morgan Stanley may conflict with your interests.

- The foregoing list of considerations and risks are not and do not purport to be a complete enumeration or explanation of the risks involved in an investment in any product or fund investing or trading in Digital Assets.

**Asset allocation and diversification** do not assure a profit or protect against loss in declining financial markets. Past performance is no guarantee of future results. Actual results may vary.

**Tax laws are complex and subject to change. Morgan Stanley Smith Barney LLC ("Morgan Stanley"), its affiliates and Morgan Stanley Financial Advisors and Private Wealth Advisors do not provide tax or legal advice and are not "fiduciaries" (under ERISA, the Internal Revenue Code or otherwise) with respect to the services or activities described herein except as otherwise provided in writing by Morgan Stanley and/or as described at [www.morganstanley.com/disclosures/dol](http://www.morganstanley.com/disclosures/dol). Individuals are encouraged to consult their tax and legal advisors (a) before establishing a retirement plan or account, and (b) regarding any potential tax, ERISA and related consequences of any investments made under such plan or account.**

Annuities and insurance products are offered in conjunction with Morgan Stanley Smith Barney LLC's licensed insurance agency affiliates.

Indices are unmanaged and investors cannot directly invest in them. They are not subject to expenses or fees and are often comprised of securities and other investment instruments the liquidity of which is not restricted. A particular investment product may consist of securities significantly different than those in any index referred to herein. Composite index results are shown for illustrative purposes only, generally do not represent the performance of a specific investment, may not, for a variety of reasons, be an appropriate comparison or benchmark for a particular investment and may not necessarily reflect the actual investment strategy or objective of a particular investment. Consequently, comparing an investment to a particular index may be of limited use.

This material is not a financial plan and does not create an investment advisory relationship between you and your Morgan Stanley Financial Advisor. We are not your fiduciary either under the Employee Retirement Income Security Act of 1974 (ERISA) or the Internal Revenue Code of 1986, and any information in this report is not intended to form the primary basis for any investment decision by you, or an investment advice or recommendation for either ERISA or Internal Revenue Code purposes. Morgan Stanley Private Wealth Management will only prepare a financial plan at your specific request using Private Wealth Management approved financial planning signature.

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Private Wealth Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest. We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Private Wealth Advisor, may vary by product and over time.

Investment and services offered through Morgan Stanley Private Wealth Management, a division of Morgan Stanley Smith Barney LLC, Member SIPC.

**For index, indicator and survey definitions referenced in this report please visit the following: <https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>**

**The Morgan Stanley Pathway Funds, Firm Discretionary UMA Model Portfolios**, and other asset allocation or any other model portfolios discussed in this material are available only to investors participating in Morgan Stanley Consulting Group advisory programs. For additional information on the Morgan Stanley Consulting Group advisory programs, see the applicable ADV brochure, available at [www.morganstanley.com/ADV](http://www.morganstanley.com/ADV) or from your Morgan Stanley Financial Advisor or Private Wealth Advisor. To learn more about the Morgan Stanley Pathway Funds, visit the Funds' website at <https://www.morganstanley.com/wealth-investmentsolutions/cgcm>. Consulting Group is a business of Morgan Stanley.

**Morgan Stanley Pathway Program Asset Allocation Models** There are model portfolios corresponding to five risk-tolerance levels available in the Pathway program. Model 1 is the least aggressive portfolio and consists mostly of bonds. As the model numbers increase, the models have higher allocations to equities and become more aggressive. Pathway is a mutual fund asset allocation program. In constructing the Pathway Program Model Portfolios, Morgan Stanley Wealth Management uses, among other things, model asset allocations produced by Morgan Wealth Management's Global Investment Committee (the "GIC"). The Pathway Program Model Portfolios are specific to the Pathway program (based on program features and parameters, and any other requirements of Morgan

Stanley Wealth Management's Consulting Group). The Pathway Program Model Portfolios may therefore differ in some respects from model portfolios available in other Morgan Stanley Wealth Management programs or from asset allocation models published by the Global Investment Committee.

**529 Plans - Investors should carefully read the Program Disclosure statement, which contains more information on investment options, risk factors, fees and expenses, and possible tax consequences before purchasing a 529 plan. You can obtain a copy of the Program Disclosure Statement from the 529 plan sponsor or your Financial Advisor.** Assets can accumulate and be withdrawn federally tax-free only if they are used to pay for qualified expenses. Earnings on nonqualified distributions will be subject to income tax and a 10% federal income tax penalty. Contribution limits vary by state. Refer to the individual plan for specific contribution guidelines. Before investing, investors should consider whether tax or other benefits are only available for investments in the investor's home state 529 college savings plan. If an account owner or the beneficiary resides in or pays income taxes to a state that offers its own 529 college savings or pre-paid tuition plan (an "In-State Plan"), that state may offer state or local tax benefits. These tax benefits may include deductible contributions, deferral of taxes on earnings and/or tax-free withdrawals. In addition, some states waive or discount fees or offer other benefits for state residents or taxpayers who participate in the In-State Plan. An account owner may be denied any or all state or local tax benefits or expense reductions by investing in another state's plan (an "Out-of-State Plan"). In addition, an account owner's state or locality may seek to recover the value of tax benefits (by assessing income or penalty taxes) should an account owner rollover or transfer assets from an In-State Plan to an Out-of-State Plan. While state and local tax consequences and plan expenses are not the only factors to consider when investing in a 529 Plan, they are important to an account owner's investment return and should be taken into account when selecting a 529 plan.

**The Morgan Stanley National Advisory 529 Plan.** The North Carolina State Education Assistance Authority (the "Authority") is an instrumentality of the State of North Carolina sponsoring the Morgan Stanley National Advisory 529 Plan, and the 529 Plan is a component of the Parental Savings Trust Fund established by the General Assembly of North Carolina. Neither the Authority, the State of North Carolina nor any other affiliated public entity or any other public entity is guaranteeing the principal or earnings in any account. Contributions or accounts may lose value and nothing stated herein, the 529 Plan Description and Participation Agreement or any other account documentation shall be construed to create any obligation of the Authority, the North Carolina State Treasurer, the State of North Carolina, or any agency or instrumentality of the State of North Carolina to guarantee for the benefit of any parent, other interested party, or designated beneficiary the rate of return or other return for any contribution to the Parental Savings Trust Fund and the 529 Plan.

**Eaton Vance and Parametric Portfolio Associates are businesses of Morgan Stanley Investment Management and are affiliated with Morgan Stanley Wealth Management.**

Morgan Stanley does not accept appointments nor will it act as a trustee but it will provide access to trust services through an appropriate third-party corporate trustee.

The trust services referenced herein are provided by the third parties listed who are not affiliated with Morgan Stanley. Neither Morgan Stanley nor its affiliates are the provider of such trust services and will not have any input or responsibility concerning a client's eligibility for, or the terms and conditions associated with these trust services. Neither Morgan Stanley nor its affiliates shall be responsible for content of any advice or services provided by the unaffiliated third parties listed herein. Morgan Stanley or its affiliates may participate in transactions on a basis separate from the referral of clients to these third parties and may receive compensation in connection with referrals made to them.

Trusts are not necessarily appropriate for all clients. There are risks and considerations which may outweigh any potential benefits. Establishing a trust will incur fees and expenses which may be substantial. Trusts often incur ongoing administrative fees and expenses such as the services of a corporate trustee or tax professional.

The Portfolio Analysis report ("Report") is generated by Morgan Stanley Smith Barney LLC's ("Morgan Stanley") Portfolio Risk Platform. The assumptions used in the Report incorporate portfolio risk and scenario analysis employed by BlackRock Solutions ("BRS"), a financial technology and risk analytics provider that is independent of Morgan Stanley. BRS' role is limited to providing risk analytics to Morgan Stanley, and BRS is not acting as a broker-dealer or investment adviser nor does it provide investment advice with respect to the Report. Morgan Stanley has validated and adopted the analytical conclusions of these risk models.

Any recommendations regarding external accounts/holdings are asset allocation only and do not include security recommendations. Transitioning from a brokerage to an advisory relationship may not be appropriate for some clients.

**IMPORTANT:** The projections or other information provided in the Report regarding the likelihood of various investment outcomes (including any assumed rates of return and income) are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Hypothetical investment results have inherent limitations.

- There are frequently large differences between hypothetical and actual results.
- Hypothetical results do not represent actual results and are generally designed with the benefit of hindsight.
- They cannot account for all factors associated with risk, including the impact of financial risk in actual trading or the ability to withstand losses or to adhere to a particular trading strategy in the face of trading losses.
- There are numerous other factors related to the markets in general or to the implementation of any specific strategy that cannot be fully accounted for in the preparation of hypothetical risk results and all of which can adversely affect actual performance.

Morgan Stanley cannot give any assurances that any estimates, assumptions or other aspects of the risk analyses will prove correct. They are subject to actual known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those shown in a Report. The information is as of the date of the Report or as otherwise noted within the Report. Morgan Stanley expressly disclaims any obligation or undertaking to update or revise any statement or other information contained in a Report to reflect any change in past results, future expectations or circumstances upon which that statement or other information is based.

**Lending products and securities based loans are provided by Morgan Stanley Smith Barney LLC, Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A., as applicable.**

The lending products described are separate and distinct, and are not connected in any way. The ability to qualify for one product is not connected to an individual's eligibility for another.

Liquidity Access Line ("LAL") is a securities based loan/line of credit product, the lender of which is either Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A., as applicable, each an affiliate of Morgan Stanley Smith Barney LLC. All LAL loans/lines of credit are subject to the underwriting standards and independent approval of Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A., as applicable. LAL loans/lines of credit may not be available in all locations. Rates, terms and conditions are subject to change without notice. To be eligible for an LAL loan/line of credit, a client must have a brokerage account at Morgan Stanley Smith Barney LLC that contains eligible securities, which shall serve as collateral for the LAL. In conjunction with establishing an LAL loan/line of credit, an LAL facilitation account will also be opened in the client's name at Morgan Stanley Smith Barney LLC at no charge. Other restrictions may apply. The information contained herein should not be construed as a commitment to lend. Morgan Stanley Private Bank, National Association and Morgan Stanley Bank, N.A. are Members FDIC that are primarily regulated by the Office of the Comptroller of the Currency. **The proceeds from a non-purpose LAL loan/line of credit (including draws and other advances) may not be used to purchase, trade, or carry margin stock; repay margin debt that was used to purchase, trade, or carry margin stock; and cannot be deposited into a Morgan Stanley Smith Barney LLC or other brokerage account.**

Residential mortgage loans/home equity lines of credit are offered by Morgan Stanley Private Bank, National Association, an affiliate of Morgan Stanley Smith Barney LLC. With the exception of the pledged-asset feature, an investment relationship with Morgan Stanley Smith Barney LLC does not have to be established or maintained to obtain the residential mortgage products offered by Morgan Stanley Private Bank, National Association. All residential mortgage loans/home equity lines of credit are subject to the underwriting standards and independent approval of Morgan Stanley Private Bank, National Association. Rates, terms, and programs are subject to change without notice. Residential mortgage loans/home equity lines of credit may not be available in all states; not available in Guam, Puerto Rico and the U.S. Virgin Islands. Other restrictions may apply. The information contained herein should not be construed as a commitment to lend. Morgan Stanley Private Bank, National Association is an Equal Housing Lender and Member FDIC that is primarily regulated by the Office of the Comptroller of the Currency. Nationwide Mortgage Licensing System Unique Identifier #663185. **The proceeds from a residential mortgage loan (including draws and advances from a home equity line of credit) are not permitted to be used to purchase, trade, or carry eligible margin stock; repay margin debt that was used to purchase, trade, or carry margin stock; or to make payments on any amounts owed under the note, loan agreement, or loan security agreement; and cannot be deposited into a Morgan Stanley Smith Barney LLC or other brokerage account.**

Through the pledged-asset feature offered by Morgan Stanley Private Bank, National Association, the applicant(s) or third party pledgor (collectively "Client") may be able to pledge eligible securities in lieu of a full or partial cash down payment or in connection with a refinance mortgage loan. To be eligible for the pledged-asset feature a Client must have a brokerage account at Morgan Stanley

Smith Barney LLC. If the value of the pledged securities in the account drops below the agreed-upon level stated in the loan documents, a Client may be required to deposit additional securities or other



collateral (such as cash) to stay in compliance with the terms of the mortgage loan. If a Client does not deposit additional securities or other collateral, the Client's pledged securities may be sold to satisfy the Client's obligation, and the Client will not be entitled to choose which assets will be sold. Borrowing against securities may not be appropriate for everyone. In deciding whether the

pledged-asset feature is appropriate, a Client should consider, among other things, the degree to which he or she is comfortable subjecting his or her investment in a home to the fluctuations of the securities market. The pledged-asset feature is not available in all states. Other restrictions may apply.

Interest-only loans enable borrowers to make monthly payments of only the accrued monthly interest on the loan during the introductory interest-only period. Once that period ends, borrowers must make monthly payments of principal and interest for the remaining loan term, and payments will be substantially higher than the interest-only payments. During the interest-only period, the total interest that the borrower will be obligated to pay will vary based on the amount of principal paid down, if any. If a borrower makes just an interest-only payment, and no payment of principal, the total interest payable by the borrower during the interest-only period will be greater than the total interest that a borrower would be obligated to pay on a traditional loan of the same interest rate having principal-and-interest payments. In making comparisons between an interest-only loan and a traditional loan, borrowers should carefully review the terms and conditions of the various loan products available and weigh the relative merits of each type of loan product appropriately. The interest rate and payments on an adjustable rate mortgage ("ARM") loan may increase over the life of a loan as interest is fixed for a specified period and then will adjust periodically thereafter. The annual percentage rate may increase after consummation of the loan.

3/6M, 5/6M, 7/6M, 10/6M adjustable rate mortgage ("ARM") loans are based on the Secured Overnight Financing Rate ("SOFR") 30-Day Average.

Relationship-based pricing offered by Morgan Stanley Private Bank, National Association is based on the value of clients', or their immediate family members' (i.e., grandparents, parents, and children) eligible assets (collectively "Household Assets") held within accounts at Morgan Stanley Smith Barney LLC. To be eligible for relationship-based pricing, Household Assets must be maintained within appropriate eligible accounts prior to the closing date of the residential mortgage loan. Relationship-based pricing is not available on conforming loans.

The Morgan Stanley Debit Card is issued by Morgan Stanley Private Bank, National Association pursuant to a license from Mastercard International Incorporated. Mastercard and Maestro are registered trademarks of Mastercard International Incorporated. The third-party trademarks and service marks contained herein are the property of their respective owners. Investments and services offered through Morgan Stanley Smith Barney LLC, Member SIPC.

Cash management and lending products and services are provided by Morgan Stanley Smith Barney LLC, Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A, as applicable.

Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A, each a national bank, Member FDIC.

The information provided herein is not intended to address any particular matter and may not apply depending on the context, as all clients' circumstances are unique.

Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

**Investment, insurance and annuity products offered through Morgan Stanley Smith Barney LLC are: NOT FDIC INSURED | MAY LOSE VALUE | NOT BANK GUARANTEED | NOT A BANK DEPOSIT | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY**

The Morgan Stanley American Express Card portfolio consists of three cards: The Platinum Card from American Express Exclusively for Morgan Stanley, the Morgan Stanley Blue Cash Preferred American Express Card, and the Morgan Stanley Credit Card.

The Platinum Card from American Express Exclusively for Morgan Stanley and the Morgan Stanley Blue Cash Preferred American Express Card are available for acquisition, and eligible clients are invited to apply. Existing Morgan Stanley Credit Card members may continue to enjoy the benefits of their card, but this product is no longer available for acquisition.

The Platinum Card® from American Express exclusively for Morgan Stanley is only available for clients who have an Eligible Account with Morgan Stanley Smith Barney LLC.

---

The Morgan Stanley Blue Cash Preferred® Card is only available for clients who have an Eligible Account with Morgan Stanley Smith Barney LLC or its eligible affiliates, including but not limited to E\*TRADE Securities LLC.

An “Eligible Account” is a brokerage account (i) held in your name, (ii) held by a trust where you are both the grantor and trustee of such trust, or (iii) held as a beneficial owner of a personal holding company, a non-operating limited liability company, a non-operating limited partnership, or a similar legal entity. Eligibility is subject to change. American Express may cancel your Card Account and participation in this program, if you do not maintain an Eligible Account.

The Platinum Card® from American Express exclusively for Morgan Stanley and the Morgan Stanley Blue Cash Preferred® Card are issued by American Express National Bank, not Morgan Stanley Smith Barney LLC. Services and rewards for the Cards are provided by Morgan Stanley Smith Barney LLC, American Express or other third parties. Restrictions and other limitations apply. See the terms and conditions for the Cards for details. Clients are urged to review fully before applying.

Morgan Stanley, its affiliates, and Morgan Stanley Financial Advisors and employees are not in the business of providing tax or legal advice. Clients should speak with their tax advisor regarding the potential tax implications of the Rewards Program upon their specific circumstances.

The Platinum Card® from American Express Exclusively for Morgan Stanley and the Morgan Stanley Blue Cash Preferred® American Express Card are issued by American Express National Bank. ©2022 American Express National Bank

American Express may share information about your Card Account with Morgan Stanley in support of Morgan Stanley programs and services. For information as to how Morgan Stanley will use your Card Account data please visit [http://www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/mssb\\_privacynotice.pdf](http://www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/mssb_privacynotice.pdf).

Obtain one (1) Additional Platinum Card for no additional annual fee. You can get up to the next three (3) Additional Platinum Cards for a total annual fee of \$175. Then, each Additional Platinum Card can be obtained for an annual fee of \$175. There is no annual fee for Additional Gold Cards. Additional Card Members must be at least 13 years of age and never have had a defaulted account with American Express.

The CashPlus Account is a brokerage account offered through Morgan Stanley Smith Barney LLC. Conditions and restrictions apply. Please refer to the CashPlus Account Disclosure Statement at <https://www.morganstanley.com/wealthdisclosures/cashplusaccountdisclosurestatement.pdf>.

The qualifying criteria to avoid the monthly account fee for all CashPlus Accounts in an Account Link Group (ALG) is: an additional eligible Morgan Stanley investment account (that may include additional fees), one Morgan Stanley Online enrollment; for Premier CashPlus account \$2,500 monthly deposit or \$25,000 Average BDP Daily Balance; for Platinum CashPlus account \$5,000 monthly deposit and \$25,000 Average BDP Daily Balance. For more information, please refer to the CashPlus Account Disclosure Statement at <https://www.morganstanley.com/wealth-disclosures/cashplusaccountdisclosurestatement.pdf>.

CashPlus Accounts receive SIPC coverage for securities and free credit balances and cash swept into the Bank Deposit Program receives FDIC insurance, both up to applicable limits.

Securities Investor Protection Corporation (“SIPC”) — Morgan Stanley Smith Barney LLC is a member of SIPC, which protects securities of its customers up to \$500,000 (including \$250,000 for claims for cash). Losses due to market fluctuation are not protected by SIPC. To obtain information about SIPC, including an explanatory SIPC brochure, contact SIPC at 1-202-371-8300 or visit [www.sipc.org](http://www.sipc.org)

Federal Deposit Insurance Corporation (“FDIC”) — Cash balances swept into deposit accounts at participating banks in the Bank Deposit Program are protected by FDIC Insurance up to applicable FDIC limits. FDIC insurance is a federal government program administered by the Federal Deposit Insurance Corporation. This insurance covers bank deposits held in checking accounts, savings accounts, certificates of deposits and money market deposits (not money market funds). This insurance comes into play in the event of a bank failure and covers client cash up to a total of \$250,000 per bank, for each “insurable capacity” (e.g. each individual, joint, etc.). It does not cover investment products that are not deposits, such as mutual funds, annuities, life insurance policies, stocks or bonds. Refer to <https://www.fdic.gov> for additional details.

The Active Assets Account is a brokerage account offered through Morgan Stanley Smith Barney LLC. Under the Bank Deposit Program, generally cash balances held in an account(s) at Morgan Stanley Smith Barney LLC are automatically deposited into an interest-bearing FDIC-insured deposit account(s) at Morgan Stanley Bank, N.A. and/or Morgan Stanley Private Bank, National

---

Association, each a national bank, member FDIC, and an affiliate of Morgan Stanley Smith Barney LLC. Detailed information on federal deposit insurance coverage is available on the FDIC's website (<https://www.fdic.gov/deposit/deposits/>).

Under the Preferred Savings program ("Preferred Savings"), Morgan Stanley Smith Barney LLC makes available interest-bearing FDIC-insured deposit account(s) at Morgan Stanley Private Bank, National Association, a national bank, Member FDIC, and an affiliate of Morgan Stanley Smith Barney LLC. Deposits placed in Preferred Savings are eligible for FDIC insurance up to \$250,000 (including principal and interest) per depositor for all deposits held in the same insurable capacity (the Maximum Applicable Deposit Insurance Amount). All deposits held in the same insurable capacity will be aggregated for purposes of the Maximum Applicable Deposit Insurance Amount, including deposits maintained through the Bank Deposit Program. The client is responsible for monitoring the total amount held with the bank. The bank also reserves the right to offer promotional rates from time to time. Detailed information on federal deposit insurance coverage is available on the FDIC's website (<https://www.fdic.gov/deposit/deposits/>). The Preferred Savings program is not intended for clients who need to have frequent access to funds and those funds will not be automatically accessed to reduce a debit or margin loan in your brokerage account. Withdrawals from an account in Preferred Savings are limited to 10 transactions per calendar month, and any withdrawal or transfer over the limit in any one calendar month will be subject to an excess withdrawal fee. The client is responsible for monitoring the total amount held with each bank. The bank also reserves the right to offer promotional rates from time to time. Detailed information on federal deposit insurance coverage is available on the FDIC's website (<https://www.fdic.gov/deposit/deposits/>). **The Savings programs are not intended for clients who need to have frequent access to funds and those funds will not be automatically accessed to reduce a debit or margin loan in your brokerage account. Withdrawals from an account in Savings are limited to 10 transactions per calendar month, and any withdrawal or transfer over the limit in any one calendar month will be subject to an excess withdrawal fee.**

Reserved clients and CashPlus accounts are eligible for unlimited global ATM fee rebates. All other clients are eligible for up to \$200 in annual global ATM fee rebates. Daily withdrawal limits of \$1,500 to \$5,000 for ATMs and \$25,000 to \$50,000 for teller cash advances, depending upon tier. Unlike ATM fees that are rebated, Morgan Stanley will not reimburse fees that banks may charge for Debit Card cash advances.

While Morgan Stanley will always make transferred and deposited funds available immediately for investment purposes, we may not make all transferred or deposited funds immediately available for withdrawal. Funds deposited by check or funds transfer may be delayed depending on certain circumstances, such as dollar value, account status, etc., and could be held for up to six business days. Please contact your Financial Advisor or Private Wealth Advisor for additional information and/or review the Fund Availability Policy by signing into your Morgan Stanley Online account.

To review the Bank Deposit Program Disclosure Statement refer to [https://www.morganstanley.com/wealth-investmentstrategies/pdf/BDP\\_disclosure.pdf](https://www.morganstanley.com/wealth-investmentstrategies/pdf/BDP_disclosure.pdf)

Certain terms, conditions, restrictions and exclusions apply. Please refer to the Morgan Stanley Debit Card Terms and Conditions at <http://www.morganstanley.com/debitcardterms> for additional information.

© 2022 Morgan Stanley Smith Barney LLC. Member SIPC. Alternative investment securities discussed herein are not covered by the protections provided by the Securities Investor Protection Corporation, unless such securities are registered under the Securities Act of 1933, as amended, and are held in a Morgan Stanley Wealth Management Individual Retirement Account.