

Alternative Investments

Innovative Strategies for Asset Allocation

This presentation is not to be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy in any jurisdiction. Investments and services offered through Morgan Stanley Smith Barney LLC.



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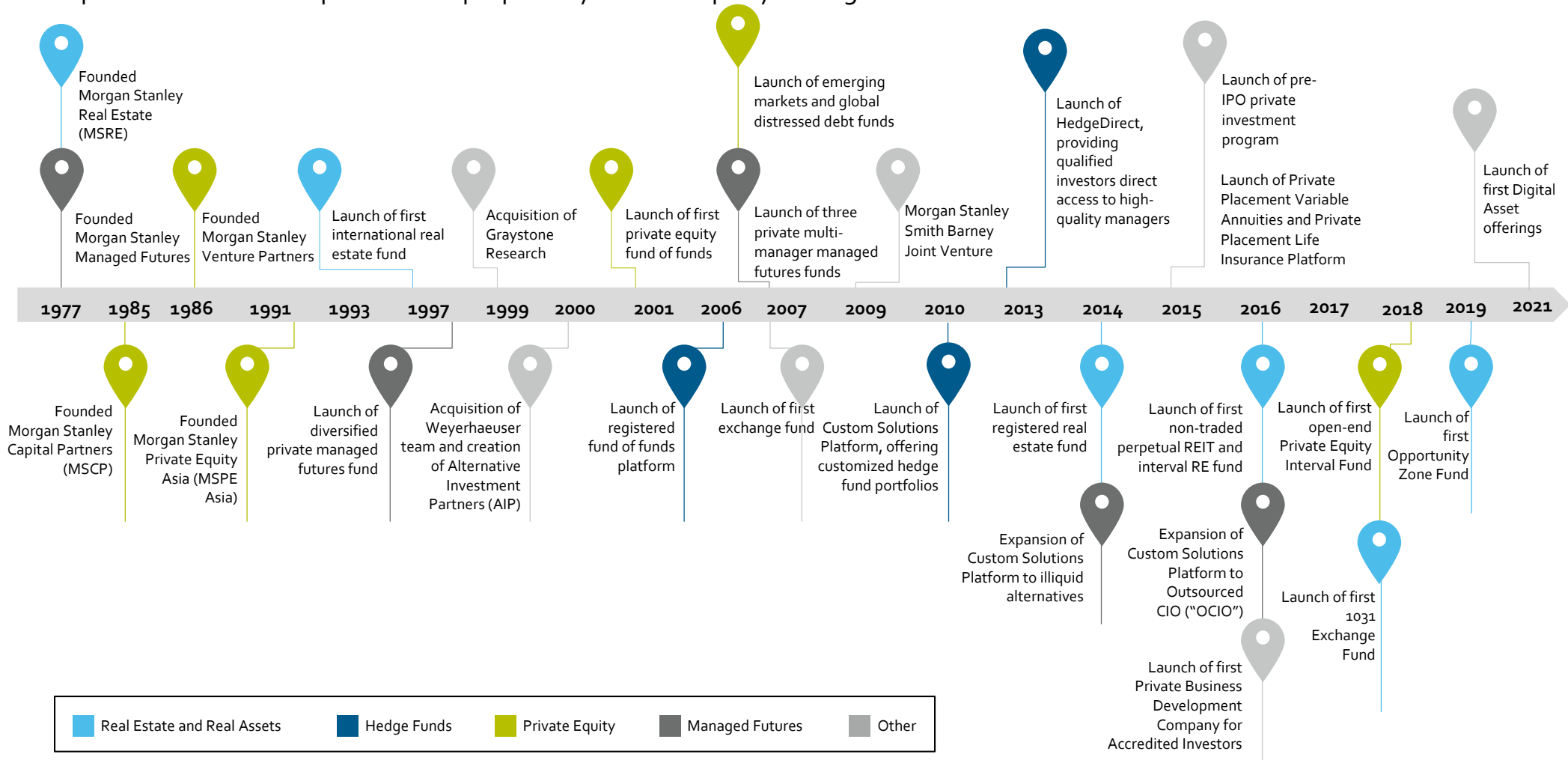
Platforms:

Private Equity	Hedge Funds / Funds of Funds
Private Credit	Managed Futures
Real Estate / Real Assets	Exchange Funds
Private Placement Variable Annuities (PPVA) and Private Placement Life Insurance (PPLI)	

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Our Commitment to Alternative Investments

Morgan Stanley launched its alternative investment business in 1977 with the founding of Morgan Stanley Real Estate and Morgan Stanley Managed Futures. Today, the firm is a global leader in alternative investments, offering a comprehensive suite of products that encompasses both proprietary and third-party managers.

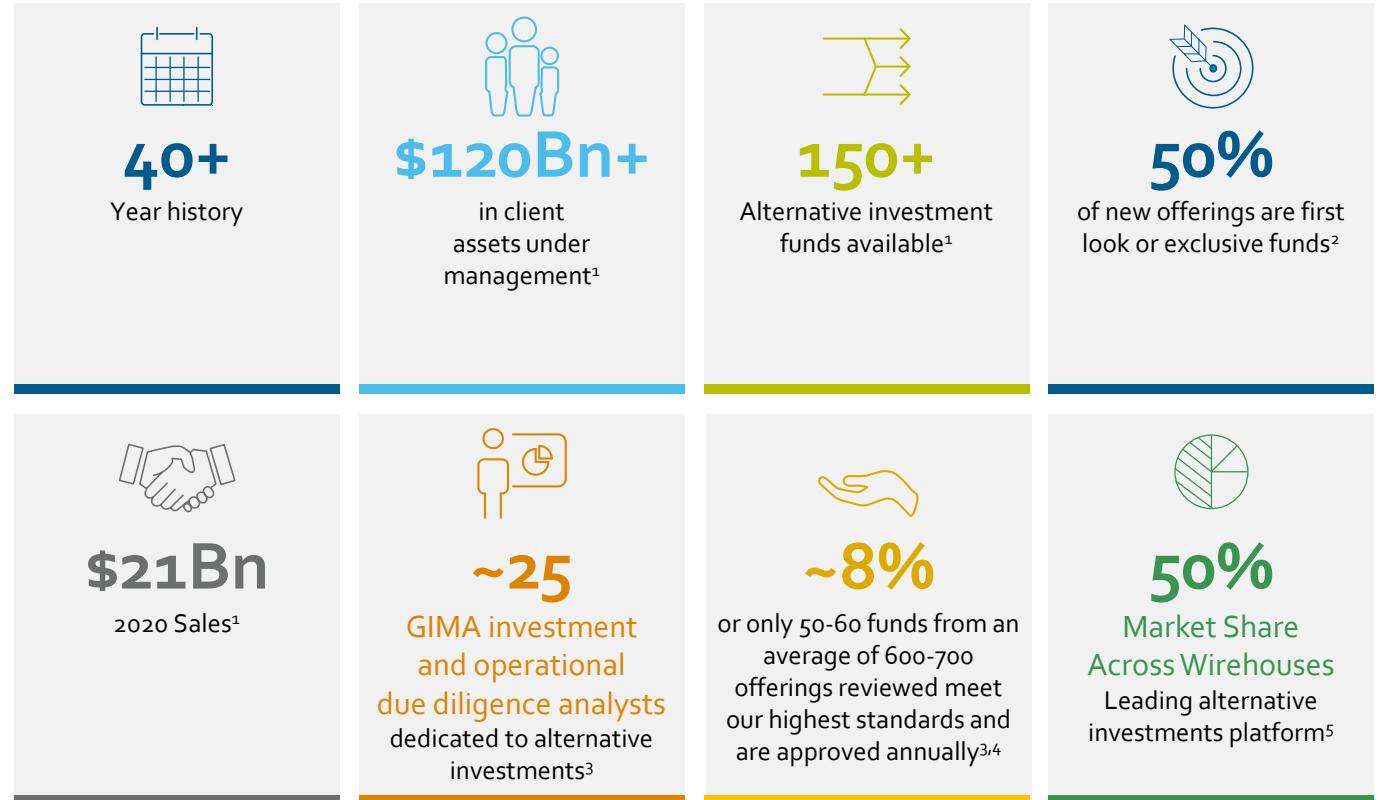


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An Industry-Leading Alternative Investments Platform

Morgan Stanley's comprehensive strategies, diverse talent and global resources enable us to provide distinctive investment opportunities that may help you enhance returns, reduce volatility, manage taxes and generate income.

- **An array of proprietary and third-party alternative investments**, including: Hedge Funds, Funds of Funds, Managed Futures, Real Estate / Real Assets, Private Equity, Private Credit and Exchange Funds
- **First look and exclusive access to funds** that may otherwise only be available to institutional investors
- **Generally lower investment minimums and institutional-level pricing** across asset classes
- **The Global Investment Manager Analysis (GIMA) team** adheres to a rigorous due diligence process to provide product agnostic advice
- **Availability in brokerage and advisory** offers flexibility to help achieve your financial goals⁶



1. Morgan Stanley Wealth Management Alternative Investments Group. As of September 30, 2021.

2. Morgan Stanley Wealth Management Alternative Investments Group. Includes only non-specialized offerings. 16 out of 30 new non-specialized offerings in 2021 as of September 30 were first look or exclusive funds.

3. Morgan Stanley Global Investment Manager Analysis team. As of December 31, 2020.

4. A majority of investments reviewed and selected by GIMA pay or cause to be paid an ongoing fee to Morgan Stanley Wealth Management in connection with Morgan Stanley Wealth Management clients that purchase such investments. Please see the disclosures at the end of this presentation for more information.

5. Money Management Institute, 2021 Retail Distribution of Alternative Investments; traditional alternative investments AUM across 4 wirehouses was \$200Bn in 2020, while Morgan Stanley represented ~\$100Bn.

6. Liquid offerings are generally available in both brokerage and advisory for qualified individual and institutional investors. Illiquid offerings are available for qualified individual and institutional investors in brokerage, and also for institutional advisory investors. Actual offering terms may vary. As of June 30, 2021.

Alternative Investments are not appropriate for all investors and are only available to qualified investors.

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Innovative Strategies to Address Financial Challenges

The power of alternative investments derives from their versatility to offer innovative strategies that align with sophisticated investors' financial goals. Across the variety of available strategies, these can be organized into four core solutions.

Income Generation

Products that seek higher returns/yield and lower volatility versus traditional fixed income investments, with potential for low correlation to stocks and bonds, a reliable current income stream and an inflation hedge

- Non-Traded REITs
- Private Credit
 - Business Development Companies
 - Direct Lending
 - Opportunistic Strategies
- Private Real Estate Funds / Real Assets

Tax Advantages

Products designed to alleviate yearly tax liability, defer payment of capital gains, harness tax-managed structures or offer a step up in basis and tax advantaged income

- Private Placement Variable Annuities
- Private Placement Life Insurance
- 1031 Exchange Funds
- Equity Exchange Funds
- Qualified Opportunity Zone Funds

Portfolio Diversification

Products that strive to maintain low correlations with traditional equity markets, with potential for lower portfolio volatility, increased risk-adjusted returns and reduced reliance on any one company, sector, country, etc.

- Absolute Return Hedge Fund Strategies
- Equity Long/Short Funds
- Funds of Hedge Funds
- Relative Value Hedge Funds
- Infrastructure

Growth Orientation

Products that aim to generate excess returns and provide clients with incremental upside potential, wealth accumulation strategies or seek to take advantage of the "illiquidity premium" of private markets

- Private Equity
 - Venture Capital
 - Growth Equity
 - Leveraged Buyout
 - Secondaries & Co-Investments
- Equity Long/Short Funds

Alternative Investments:
4 Core Solutions

Source: Morgan Stanley Wealth Management Alternative Investments Group.

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A Strong Network of Alternative Investment Managers

Morgan Stanley has extensive experience in the alternative investments industry through a strong commitment to managing alternative investment strategies across an established global network.

The power of the Morgan Stanley Alternative Investments platform provides clients access to leading managers¹ in the industry.



¹. Above is a sample of the managers that may be available on our platform and is subject to change. While access to the managers identified above has been offered through our platform in the past, and we expect to continue to offer access in the future, at any given time a manager may not have a product or service available for investment through our platform.

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A Comprehensive Alternative Investments Platform

Qualified investors benefit from a broad range of vehicles across the liquidity spectrum, with access to exclusive offerings, often at lower investment minimums.

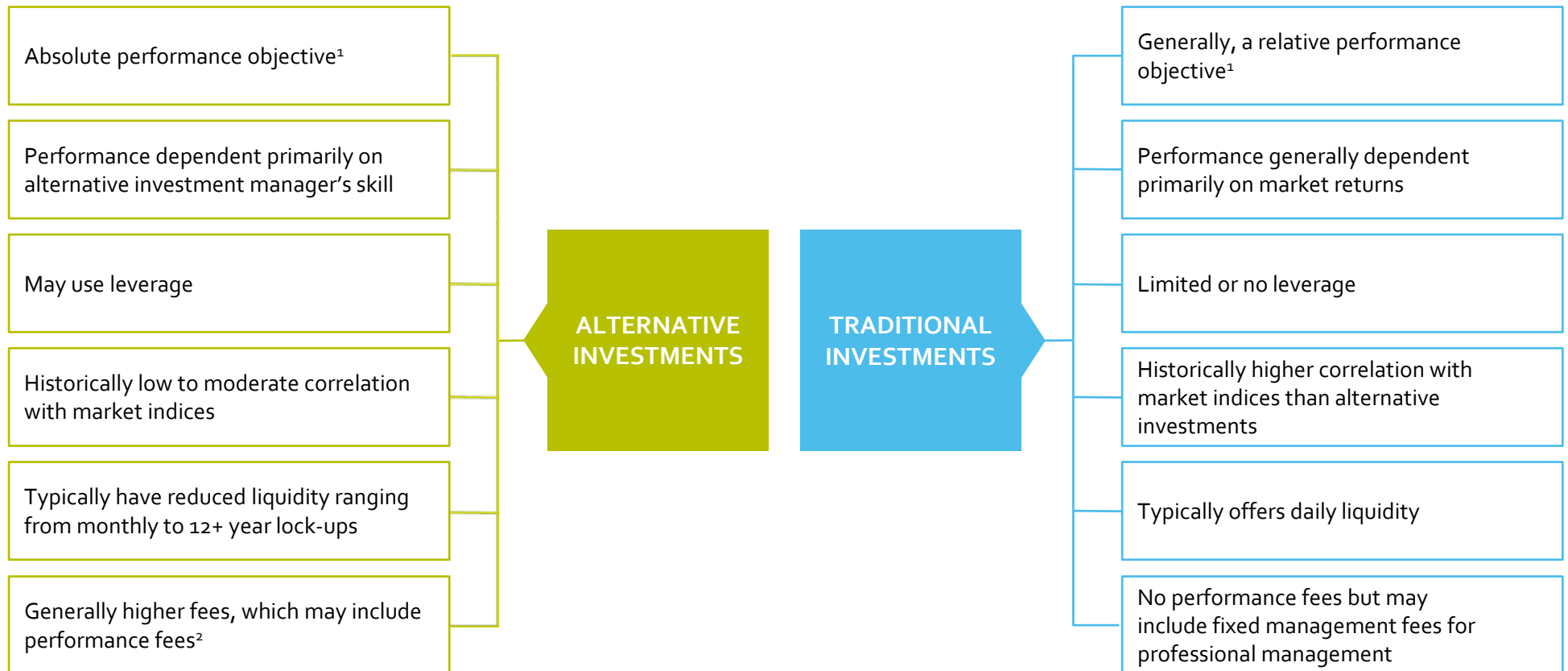


1. Number of funds open for investment as of June 30, 2021, and subject to change.

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Alternative Investments Differ from Traditional Investments

Alternative investments describe a spectrum of strategies that cannot be accessed through traditional fixed income and equity markets. These strategies have the potential to help lower volatility and increase diversification in clients' portfolios.



Source: Morgan Stanley Wealth Management Global Investment Committee. Not all strategies may adhere to characteristics specified above.

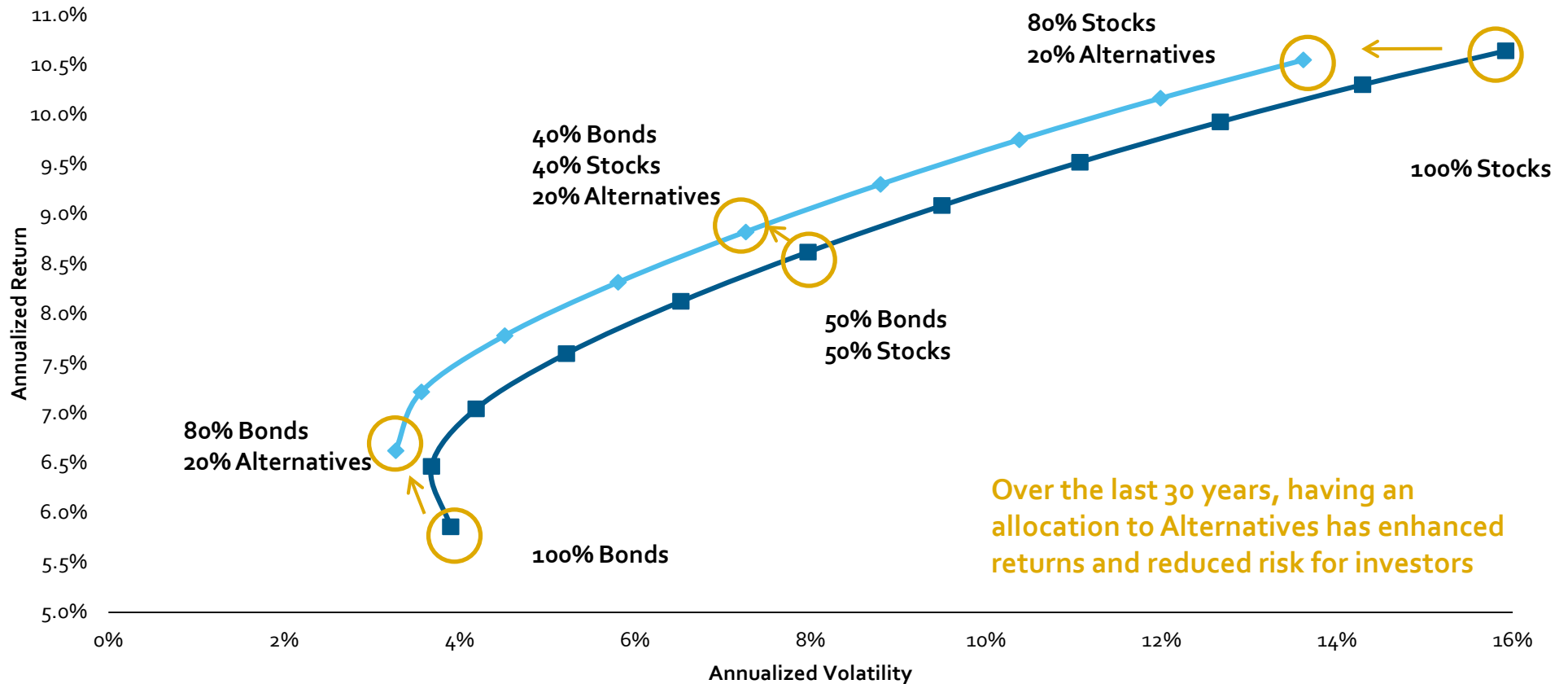
1. There is no guarantee that these objectives will be met.
2. Generally includes fees such as management and performance fees for professional management.

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Adding Alternatives Exposure to a Portfolio May Reduce Volatility and Potentially Increase Returns

Risk and Return Trade-Off With and Without Alternative Investments

Data as of January 1, 1990 to June 30, 2021



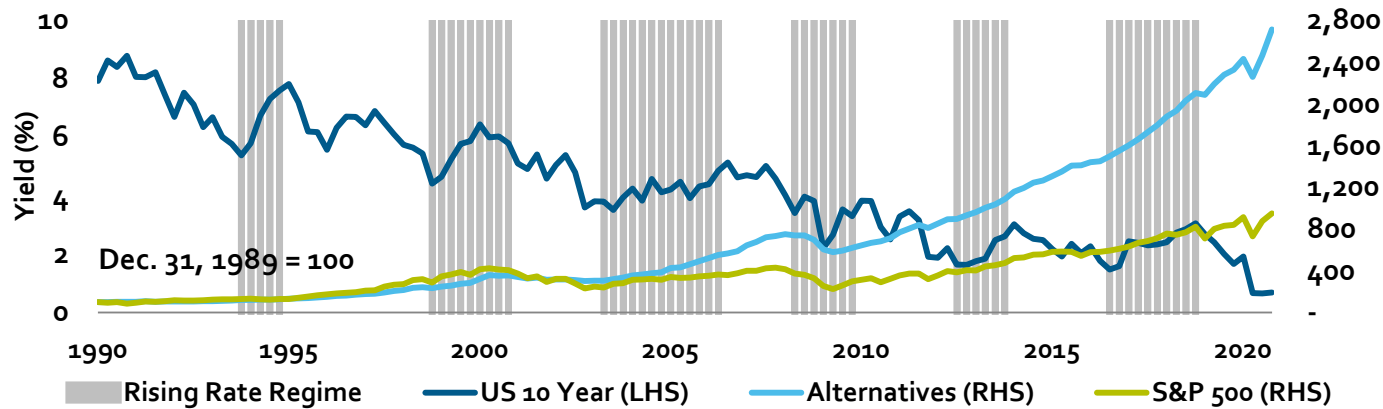
Source: Bloomberg, Morgan Stanley Wealth Management GIC, Private Equity Index Data: The Cambridge Associates Private Equity Index tracks the returns of a variety of private equity strategies, including buyout, control-oriented distressed, growth equity, energy, upstream energy and royalties, and venture capital. The data is updated quarterly using the Cambridge Associates Benchmark Calculator, with a lag of several months. Private equity returns are net to limited partners. Stocks are represented by the S&P 500 Total Return Index. Bonds are represented by Barclays U.S. Aggregate. Alternatives Investment are composed of 16.6% Equity Hedge (HFRI Equity Hedge Index), 16.6% Equity Neutral (HFRI Equity Market Neutral Index), 33% Private Equity, and 33% Real Estate (National Council of Real Estate Investment Fiduciaries Property Index – NCREIF). Alternatives investments are not appropriate for all investors.

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Alternative Investments Offer Diversification in Challenging Market Environments

Alternatives' Outperformance in *Rising Rate Environments*

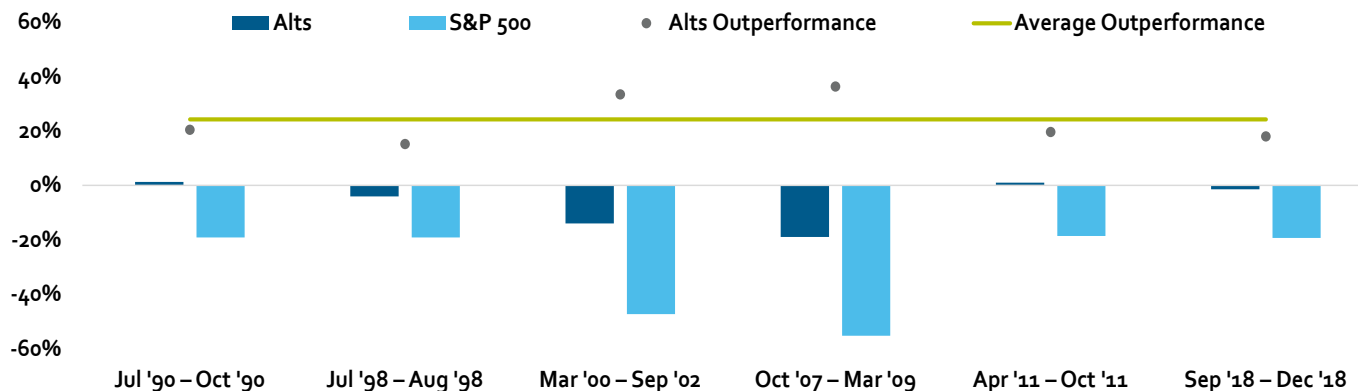
Quarterly Data as of March 31, 2021



**Avg. Alts
outperformance
in rising rate
environments** **+28%**

Alternatives' Outperformance in *Equity Bear Markets*

Historical Data 1980-2020



**Avg. Alts
outperformance
in equity bear
markets** **+25%**

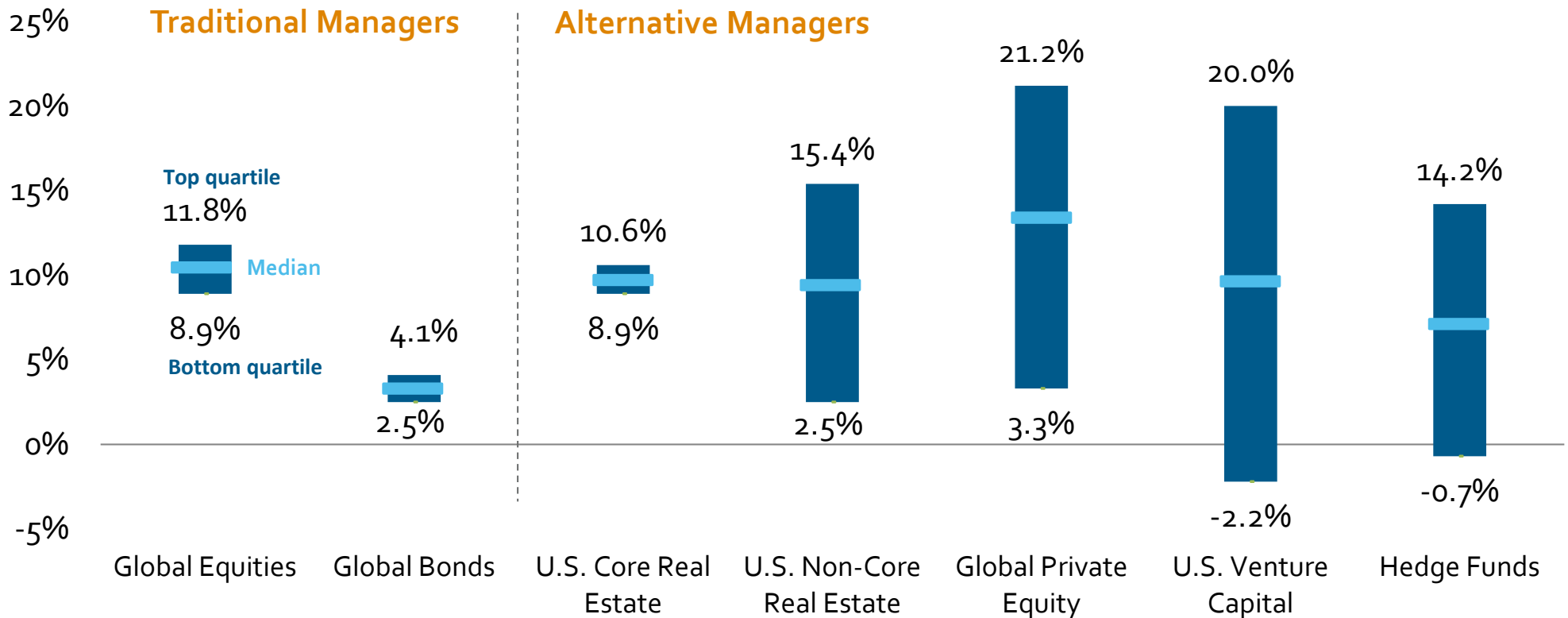
Source: Bloomberg; Morgan Stanley Wealth Management. Alternatives Investments are composed of 16.6% Equity Hedge (HFRI Equity Hedge Index), 16.6% Equity Neutral (HFRI Equity Market Neutral Index), 33% Private Equity, and 33% Real Estate (National Council of Real Estate Investment Fiduciaries Property Index - NCREIF). Performance illustrated does not reflect fees or expenses, actual investor returns would be lower if these were deducted.

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The Importance of Manager Selection Across Asset Classes

Private and Public Manager Return Dispersion

Based on returns from 2Q 2009 – 2Q 2019



Source: Lipper, NCREIF, Cambridge Associates, HFRI, J.P. Morgan Asset Management Guide to Alternatives, Morgan Stanley Wealth Management. Note: Global equities (large cap) and global bonds dispersion are based on the world large stock and world bond categories, respectively. Manager dispersion is based on 2Q 2009 – 2Q 2019 annual returns for global equities, global bonds, U.S. core real estate and hedge funds. U.S. non-core real estate, U.S. private equity and U.S. venture capital are represented by the 10-year horizon internal rate-of-return (IRR) ending 2Q 2019. Internal rate of return (IRR) is the interest rate at which the net present value of all the cash flows (both positive and negative) from a project or investment equal zero. Internal rate of return is used to evaluate the attractiveness of a project investment.

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Global Investment Committee: Alternative Investment Strategic Asset Allocation

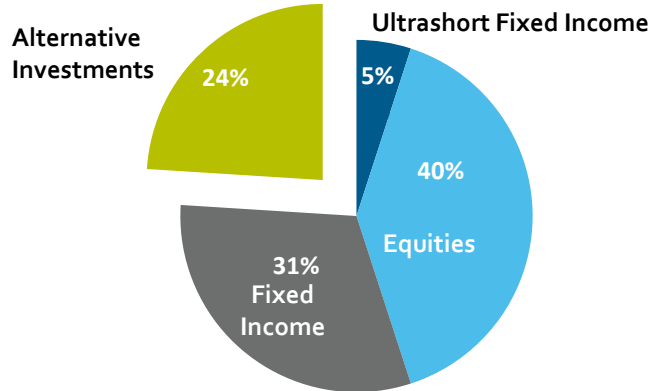
The Morgan Stanley Wealth Management Global Investment Committee (GIC) continually monitors developing economic and market conditions, reviews tactical outlooks, recommends model portfolio weightings, and also produces a suite of strategy, analysis, commentary, other reports and broadcasts

Depending on investor risk tolerance and net worth, the GIC may recommend a certain allocation to alternative investments to gain additional benefits of diversification. These guidelines serve as one source for your Financial Advisor’s or Private Wealth Advisor’s asset allocation advice

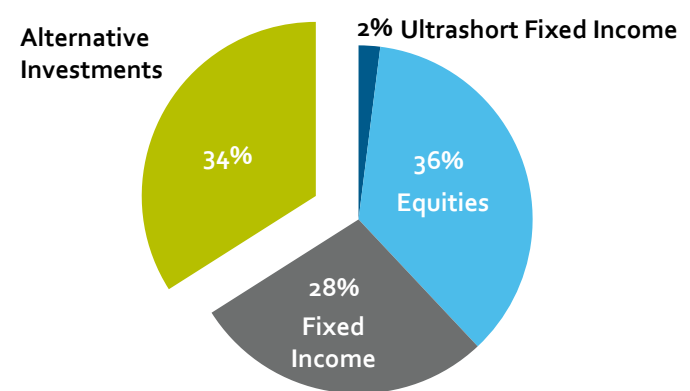
Ask your Financial Advisor or Private Wealth Advisor for more details and current allocation models at the time you are making your investment decisions

PORTFOLIO DIVERSIFICATION: GLOBAL INVESTMENT COMMITTEE STRATEGIC ASSET ALLOCATION¹

<\$25MM in Investable Assets



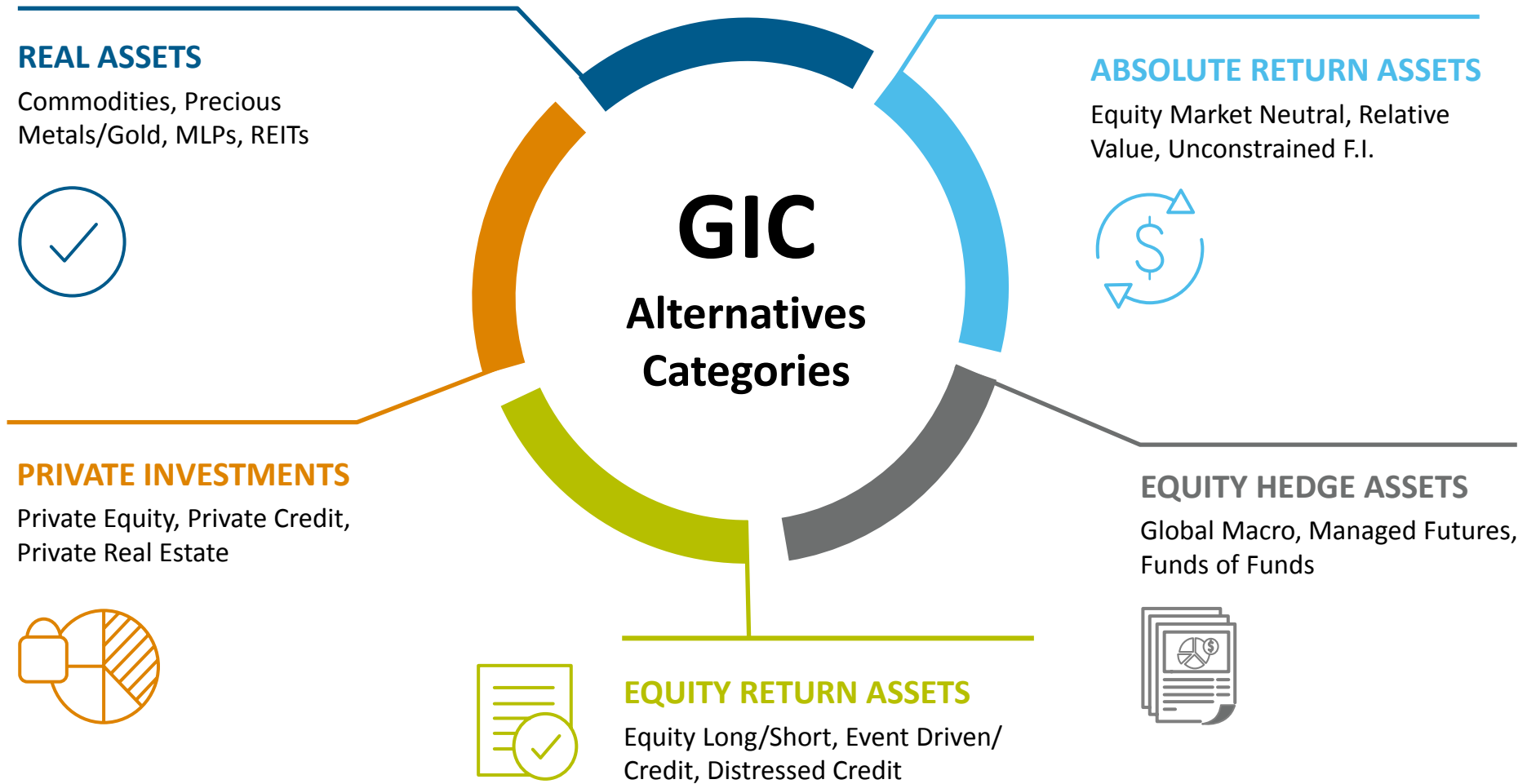
>\$25MM in Investable Assets



As of March 31, 2021. Strategic asset allocation models depicted above are based on Model 3: Balanced Growth. Please note there are five asset allocation models ranging from conservative to aggressive (Model 1: Wealth Conservation, formerly known as Capital Preservation; Model 2: Income; Model 3: Balanced Growth; Model 4: Market Growth; Model 5: Opportunistic Growth). The asset allocation models are subject to change from time to time. The GIC defines alternative investments as the following: REITS, Commodities, Master Limited Partnerships, Hedged Strategies (which include Traditional and 40 Act Alternative Investments including: Hedge Funds, Funds of Funds, Alternative Mutual Funds), Managed Futures, Private Real Estate and Private Equity. For illustrative purposes only. This does not represent individually tailored investment advice. Actual client portfolio will vary based on individual circumstances.

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The Global Investment Committee (GIC) Categorizes Alternative Investments into Five Buckets



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What is Global Investment Manager Analysis (GIMA)?

GIMA engages with a broad array of investment managers to identify high-quality strategies for your portfolio.



- **~70** investment professionals dedicated to manager analysis
- Average industry experience of **~14** years within traditional long-only and alternative investment products
- Team reviews and monitors a broad universe of traditional and alternative investment products that are offered at Morgan Stanley



Traditional Team Provides Advice On:

- Mutual Funds
- Offshore Mutual Funds
- Exchange-Traded Funds (ETFs)
- Separately Managed Accounts
- Collective Investment Trusts



Alternatives Team¹ Provides Advice On:

- Alternative Mutual Funds
- Hedge Funds
- Funds of Hedge Funds
- Real Assets
- Managed Futures
- Exchange Funds
- Private Equity, Private Credit and Private Real Estate

Includes dedicated team of operational due diligence professionals

All information as of December 31, 2020 and subject to change.

1. GIMA can leverage analysts focused on single-manager hedge funds from within the Morgan Stanley Investment Management group.

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The GIMA Team Utilizes a Robust Alternative Investments Due Diligence Process

The Global Investment Manager Analysis (GIMA) team, a leader in manager analysis, applies a common framework in its review of all investment products under consideration.



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Alternative Investment Manager Due Diligence at Morgan Stanley

The Global Investment Manager Analysis (GIMA) team engages with a broad array of investment managers to identify high-quality strategies for your portfolio. Before managers are selected for inclusion on the platform, GIMA employs a thorough and rigorous due diligence process.

IDENTIFYING HIGH-QUALITY MANAGERS

~25 investment and operational due diligence analysts provide product-agnostic advice

Decisions are governed by experienced committee(s)

Funds are continuously evaluated to reaffirm manager conviction

RIGOROUS MANAGER ANALYSIS



~8% OF FUNDS REVIEWED ANNUALLY MEET OUR HIGHEST STANDARDS

~130 ALTERNATIVE FUNDS OPEN FOR INVESTMENT

Source: Morgan Stanley Wealth Management Global Investment Manager Analysis. As of December 31, 2020.

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GIMA 2021 Alternative Investments Themes

THEME	IMPLEMENTATION	KEY RATIONALE
DIVERSIFYING AWAY FROM THE TRADITIONAL "40"	Real Assets and Inflation Hedges Infrastructure & Green Energy Hedge Funds as Bond Alternatives	For fixed income investors, the prospect of rising interest rates and tight credit spreads presents challenges for bond allocations from a diversification, risk mitigation and income perspective. Real assets and inflation hedges such as real estate, commodities and gold, as well as other portfolio diversifiers such as certain hedge fund strategies and illiquid investments in infrastructure, can help balance portfolios.
PRIVATE LENDING OPPORTUNITIES FOR ENHANCED INCOME	Direct Lending Real Estate Debt & Asset Based Lending	Given the current low rate environment and continued bank retrenchment from higher-yielding loan originations, consider strategies that can enhance income and total return, while taking appropriate credit risk. An improvement in the recent environment for corporate lending may lead to better risk-adjusted returns. Bank retrenchment from certain lending markets and dislocations within real estate and asset-based lending can provide non-correlated fixed income exposure and more favorable investor support.
TARGETED DISLOCATION OPPORTUNITIES IN PRIVATE INVESTMENTS	Niche Recovery Plays in Distressed Credit & Private Equity Opportunistic Real Estate Secondaries	With uncertainty most acute around certain cyclical, COVID-impacted sectors, we see flexible, opportunistic providers of capital that can invest in equities, credit or hybrid capital structures as strategic/rescue capital. Flexible capital providers may see less competitive situations where there is relative value. Opportunistic Real Estate and Secondary managers may be able to take advantage of these dislocations and the need for strategic capital in private markets.

Source: Morgan Stanley Wealth Management GIMA. Illiquidity premium is the extra yield investors expect to earn for giving up control to liquidate their capital for a certain period of time. The J-curve effect refers to a "J" shaped section of a time-series graph in which the curve falls into negative territory and then gradually rises to a higher level than before the decline.

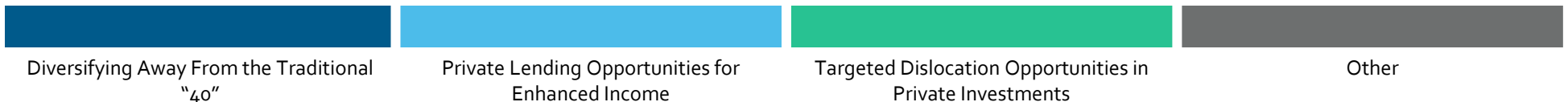
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Alternative Investments Strategies in Development

4th Quarter 2021

Private Equity Venture Capital	Investing directly in PE investments, with a target investment period of 12 months. Targeting 12-25 investments.	Private Credit Distressed and Special Situations	Multi-strategy approach to distressed, targeting mix of control, influence and trading investments, up and down the capital structure
Private Equity Fund of Funds	Make diversified direct investments in a portfolio of institutional private equity, venture and private debt instrument funds that are presented on MSWM platforms.	Private Credit Direct Lending	Multi-strategy approach to distressed, targeting mix of control, influence and trading investments, up and down the capital structure
Private Equity Venture Capital Secondaries	The fund will invest principally into operating companies and venture capital and growth equity funds as well as opportunistically invest into private investment funds and companies. Investments are expected to be made primarily through secondary market transactions	Real Estate Non-traded REIT	Invests primarily in directly originated senior secured term loans issued by U.S. middle market companies backed by financial sponsors
Real Estate Opportunistic Real Estate	The fund will focus on investments located in or supporting select urban centers. It intends to capitalize on changing consumer demand as well as government mandates for continued infrastructure investment across the United States.	Private Equity Growth Equity	Invest in healthcare companies with \$20-200M in revenue, where EW can act as the lead investor and makes both majority and minority equity investments. Targets investing 80% into pharmaceuticals and medical device companies, 20% in healthcare IT and technology-enabled healthcare services businesses
Real Estate Venture Capital	Invest in a strategic combination of global "best in class" institutional private real estate investment funds and public real estate securities using a comprehensive multi-strategy, multi-manager, and multi-sector approach	Private Equity Growth Equity	Dedicated blockchain fund of funds providing diversified exposure to blockchain investments. Investment categories include early-stage equity and tokens as well as select later stage token investments and protocol, infrastructure and decentralized applications
Private Credit Special Opportunities	Looking to capitalize on widespread dislocation by investing in asset back opportunities in commercial real estate, residential credit, structured credit, and specialty finance.		

GIMA 2021 ALTERNATIVE INVESTMENTS THEMES



As of November 2021. The information above is provided for illustrative purposes only. The strategies mentioned are at various stages of development and subject to further consideration and approvals. No assurance can be given that the strategies noted will result in a product offering, that any product offered will use the strategy in the manner described, be available on the dates shown or available to all clients. Please ask your Financial Advisor or Private Wealth Advisor for more detail on client eligibility to purchase alternative investments.

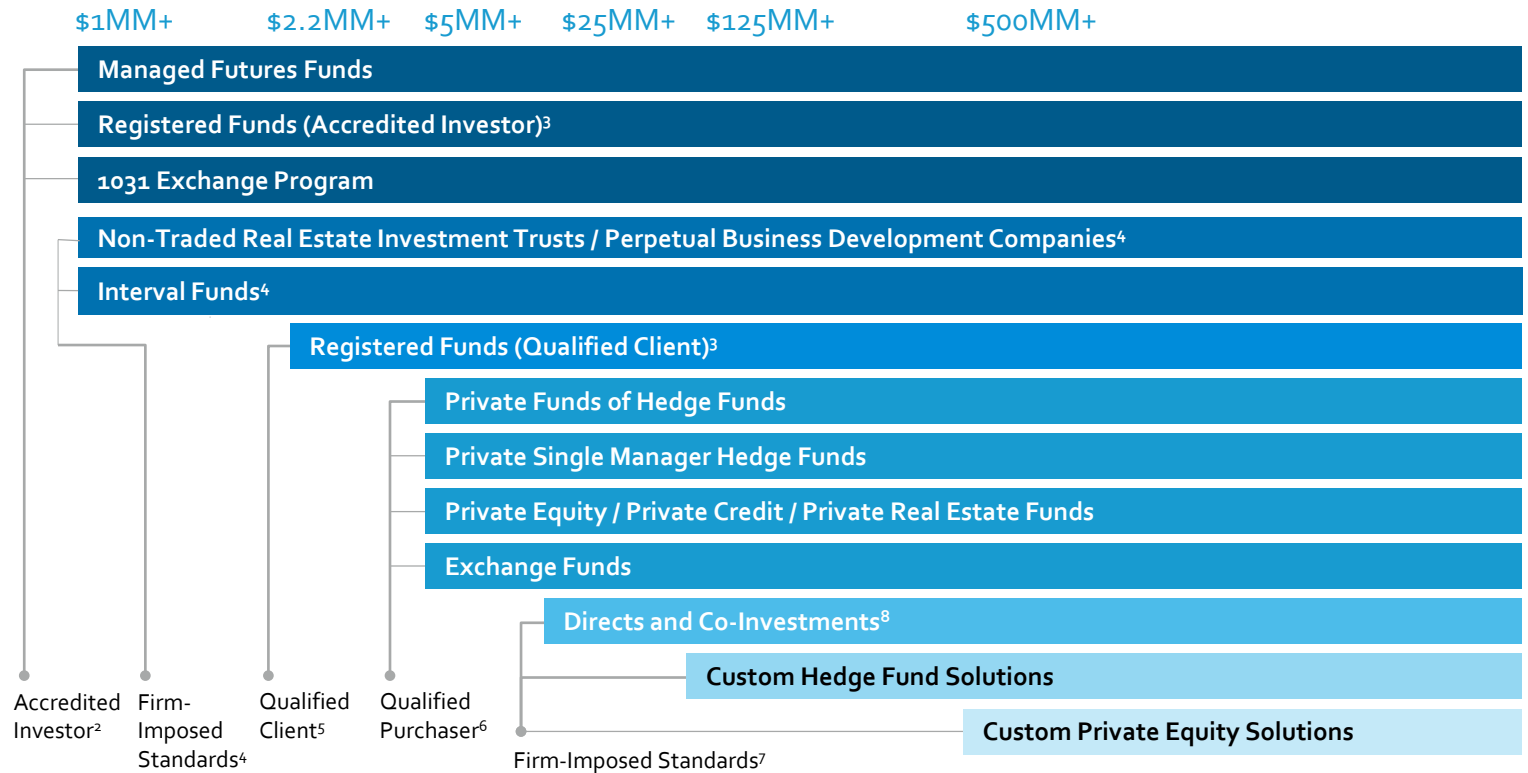
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Alternative Investments Eligibility

CLIENT NET WORTH/NET INVESTABLE ASSET MINIMUMS

Investors participating in alternative investments offered through Morgan Stanley must meet certain SEC and/or state standards depending on the structure of the fund or service. Morgan Stanley may impose a qualification standard that is higher than those required to meet SEC/state standards. Additionally, individual funds or services may have their own investment minimum and eligibility criteria.

Alternative investments are offered only to qualified investors. Client eligibility¹ to purchase alternative investments is typically based on the client's net worth, or as applicable, net investable assets, as shown:



1. Eligibility on its own does not satisfy all requirements and guidelines, nor does it imply appropriateness. Speak with your Financial Advisor or Private Wealth Advisor to help determine if alternative investments may be appropriate for you. Please see the Important Disclosures at the end of this publication for additional information and the applicable offering documents for specific eligibility requirements.
2. Funds that rely on an Accredited Investor standard generally require a minimum net worth of \$1 million for an individual (excluding primary residence), and \$5 million for an entity.
3. The specific Registered Fund structure will determine eligibility standards. Funds that rely on an Accredited Investor standard and/or a Qualified Client Standard generally include Registered Funds of Hedge Funds, Registered Single Manager Hedge Funds, Registered Private Equity Funds, and Private Business Development Companies.
4. Non-Traded Real Estate Investment Trusts and Perpetual Business Development Companies generally require a minimum net worth of \$1 million or income of \$200K and \$250K net worth for an individual, and \$5 million for an entity, and must meet specific liquid net worth requirements. Interval Funds generally require a minimum net worth of \$1 million or income of \$200K and \$250K net worth for an individual, and \$5 million for an entity. Please see applicable offering documents.
5. Funds that rely on a Qualified Client standard require an individual or entity to have a minimum net worth of \$2.2 million, exclusive of primary residence, or have at least \$1.1 million invested under management with the manager of the fund.
6. Funds that rely on a Qualified Purchaser standard must also meet Accredited Investor standards, and require minimum net investable assets of \$5 million for an individual, and \$25 million for an entity.
7. In addition to meeting Accredited Investor and Qualified Purchaser standards, these funds are subject to firm-imposed higher eligibility standards.
8. Eligibility is reviewed on a case-by-case basis and is subject to change.

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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. **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. For more information, please refer to the ADV Brochure for your program(s), available at 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. 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.

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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.

Buying, selling, and transacting in Bitcoin or other 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:

- Bitcoin and other digital assets have only been in existence for a short period of time and historical trading prices for Bitcoin and other digital assets have been highly volatile. The price of Bitcoin and other digital assets could decline rapidly, and **investors could lose their entire investment**.

- Certain digital asset funds and products, including Bitcoin 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, including Bitcoin, 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, including Bitcoin 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 Bitcoin and other 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, apart from Bitcoin, 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 other digital assets. Buyers, sellers and users of such other digital assets should thoroughly familiarize themselves with such risks and considerations before transacting in such other digital assets.

- The value of Bitcoin and other digital assets may be negatively impacted by future legal and regulatory developments, including but not limited to increased regulation of Bitcoin or such other digital assets. Any such developments may make Bitcoin or such other 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 including Bitcoin are uncertain. Prospective investors should consult their own tax advisors concerning the tax consequences to them of the purchase, ownership and disposition of Bitcoin and other 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 Bitcoin 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 Bitcoin if the fund or product relies on an impacted exchange and may also materially decrease the price of Bitcoin, 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, including a Bitcoin-related 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, including Bitcoin, 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, including Bitcoin.
- Investors in funds or products investing or transacting in Bitcoin and/or other digital assets may not benefit to the same extent (or at all) from "airdrops" with respect to, or "forks" in, the Bitcoin (or other relevant digital asset's) blockchain, compared to investors who hold Bitcoin (or such other relevant digital asset) directly instead of through a fund or product. Additionally, a "fork" in the Bitcoin blockchain could materially decrease the price of Bitcoin.
- Digital assets such as Bitcoin or other digital asset product is/are not legal tender, and is 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 (of which Bitcoin is **not** one). 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, Bitcoin's and other digital asset products' use is limited to businesses and individuals that are willing to accept them. If no one were to accept digital currencies, Bitcoin and other virtual currency products would very likely become worthless.
- Platforms that buy and sell Bitcoin or other 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, including Bitcoin.
- Unlike US banks and credit unions that provide certain guarantees of safety to depositors, there are no such safeguards provided to digital assets, such as Bitcoin, held in digital wallets by their providers or by regulators.
- Due to the anonymity Bitcoin and other digital assets offer, it has 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 Bitcoin or other digital asset products.
- Bitcoin and other digital assets may not have an established track record of credibility and trust. Further, any performance data relating to Bitcoin, Bitcoin-related products or other 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, including Bitcoin, 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 Bitcoin or other virtual currency products versus the USD historically has been very volatile and the exchange rate could drastically decline. For example, the exchange rate of Bitcoin versus the USD has in the past dropped more than 50% in a single day. Bitcoin 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 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 the any product or fund investing or trading in Bitcoin and/or other 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. 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 Consulting Group Capital Markets 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 or from your Morgan Stanley Financial Advisor or Private Wealth Advisor. To learn more about the Consulting Group Capital Markets Funds, visit the Funds' website at www.morganstanley.com/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.

Lifestyle Advisory Services: Products and services are provided by third party service providers, not Morgan Stanley Smith Barney LLC ("Morgan Stanley"). Morgan Stanley may not receive a referral fee or have any input concerning such products or services. There may be additional service providers for comparative purposes. Please perform a thorough due diligence and make your own independent decision.

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.

Morgan Stanley Smith Barney LLC ("Morgan Stanley") is the manager of the Morgan Stanley National Advisory 529 Plan and is responsible for its administration, distribution and investment management. For more information please see the Morgan Stanley National Advisory 529 Plan Description and the applicable Morgan Stanley ADV brochure at www.ms.com/adv.

The Morgan Stanley National Advisory 529 Plan is a proprietary offering available exclusively to Morgan Stanley advisory account clients. The Plan is not transferable to other intermediaries.

To obtain **Tax-Management Services**, a client must complete the Tax-Management Form, and deliver the signed form to Morgan Stanley. For more information on Tax-Management Services, including its features and limitations, please ask your Financial Advisor for the Tax Management Form. Review the form carefully with your tax advisor. Tax-Management Services: (a) apply only to equity investments in separate account sleeves of client accounts; (b) are not available for all accounts or clients; and (c) may adversely impact account performance. Tax-management services do not constitute tax advice or a complete tax-sensitive investment management program. There is no guarantee that tax-management services will produce the desired tax results.

Morgan Stanley Smith Barney LLC 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.

A **LifeView Financial Goal Analysis or LifeView Financial Plan ("Financial Plan")** is based on the methodology, estimates, and assumptions, as described in your report, as well as personal data provided by you. It should be considered a working document that can assist you with your objectives. Morgan Stanley Smith Barney LLC ("Morgan Stanley") makes no guarantees as to future results or that an individual's investment objectives will be achieved. The responsibility for implementing, monitoring and adjusting your financial goal analysis or financial plan rests with you. After your Financial Advisor delivers your report to you, if you so desire, your Financial Advisor can help you implement any part that you choose; however, you are not obligated to work with your Financial Advisor or Morgan Stanley.

Since **life and long-term care insurance** are medically underwritten, you should not cancel your current policy until your new policy is in force. A change to your current policy may incur charges, fees and costs. A new policy will require a medical exam. Surrender charges may be imposed and the period of time for which the surrender charges apply may increase with a new policy. You should consult with your own tax advisors regarding your potential tax liability on surrenders.

The Morgan Stanley Global Impact Funding Trust, Inc. ("MS GIFT, Inc.") is an organization described in Section 501(c) (3) of the Internal Revenue Code of 1986, as amended. MS Global Impact Funding Trust ("MS GIFT") is a donor-advised fund. Morgan Stanley Smith Barney LLC provides investment management and administrative services to MS GIFT. Back office administration provided by RenPSG, an unaffiliated charitable gift administrator.

Important Risk Information for Securities Based Lending: You need to understand that: (1) Sufficient collateral must be maintained to support your loan(s) and to take future advances; (2) You may have to deposit additional cash or eligible securities on short notice; (3) Some or all of your securities may be sold without prior notice in order to maintain account equity at required maintenance levels. You will not be entitled to choose the securities that will be sold. These actions may interrupt your long-term investment strategy and may result in adverse tax consequences or in additional fees being assessed; (4) Morgan Stanley Bank, N.A., Morgan Stanley Private Bank, National Association or Morgan Stanley Smith Barney LLC (collectively referred to as "Morgan Stanley") reserves the right not to fund any advance request due to insufficient collateral or for any other reason except for any portion of a securities based loan that is identified as a committed facility ; (5) Morgan Stanley reserves the right to increase your collateral maintenance requirements at any time without notice; and (6) Morgan Stanley reserves the right to call securities based loans at any time and for any reason.

With the exception of a margin loan, the proceeds from securities based loan products may not be used to purchase, trade, or carry margin stock (or securities, with respect to Express CreditLine); repay margin debt that was used to purchase, trade or carry margin stock (or securities, with respect to Express CreditLine); and cannot be deposited into a Morgan Stanley Smith Barney LLC or other brokerage account. A non-purpose securities based loan cannot be used to purchase, trade or carry securities or margin stock, as applicable.

To be eligible for a securities based loan, a client must have a brokerage account at Morgan Stanley Smith Barney LLC that contains eligible securities, which shall serve as collateral for the securities based loan.

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.

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 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.

The Platinum Card® from American Express exclusively for Morgan Stanley is issued by American Express National Bank, not Morgan Stanley Smith Barney LLC. Services and rewards for the Cards are provided by either 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 is issued by American Express National Bank. ©2021 American Express National Bank.

To be eligible to earn the 60,000 Membership Rewards® points, you must be enrolled in the Membership Rewards program at the time of eligible purchase. 60,000 Membership Rewards points will be credited to your account after you charge a total of \$5,000 (the "Threshold Amount") or more of eligible purchases on your Platinum Card from American Express within the first 3 months of Platinum Card Membership. Eligible purchases can be made by the Basic Card Member and any Additional Card Members on a single Card account. Eligible purchases are purchases for goods and services minus returns and other credits. Eligible purchases to meet the Threshold Amount do NOT include fees or interest charges, purchases of travelers' checks, purchases or reloading of prepaid cards, purchases of gift cards, person-to-person payments, or purchases of other cash equivalents. Additional terms and restrictions apply. Points will be credited to your Membership Rewards account within 8–12 weeks after the last eligible purchase you made to meet the Threshold Amount appears on your monthly billing statement. If you have any questions regarding this offer, please call the number on the back of your Card. If we in our sole discretion determine that you have engaged in abuse, misuse, or gaming in connection with the welcome offer in any way or that you intend to do so (for example, if you applied for one or more cards to obtain a welcome offer(s) that we did not intend for you; if you cancel or downgrade your account within 12 months after acquiring it; or if you cancel or return purchases you made to meet the Threshold Amount), we may not credit the 60,000 Membership Rewards points to, we may freeze the 60,000 Membership Rewards points credited to, or we may take

away the 60,000 Membership Rewards points from your account. We may also cancel this Card account and other Card accounts you may have with us. Your Card account must not be canceled or past due at the time of fulfillment of any offers. You can earn 60,000 Membership Rewards points after spending \$5,000 starting from the date your account is approved. In rare instances, your period to spend \$5,000 may be shorter than 3 months if there is a delay in receiving your Card. Also, purchases may fall outside of the 3 month period in some cases, such as a delay in merchants submitting transactions to us or if the purchase date differs from the date you made the transaction. (For example, if you buy goods online, the purchase date may be the date the goods are shipped.) Terms and Conditions for the Membership Rewards® program apply. Visit membershiprewards.com/terms for more information. Participating partners and available rewards are subject to change without notice. The value of Membership Rewards points varies according to how you choose to use them. To learn more, go to www.membershiprewards.com/pointsinfo. American Express reserves the right to modify or revoke offer at any time. The Morgan Stanley Cards from American Express are issued by American Express 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.

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.

You will get one point for each dollar charged for an eligible purchase on your Platinum Card® from American Express. You will get 4 additional points (for a total of 5 points) for each dollar spent on eligible travel purchases made on amextravel.com. Eligible travel purchases include the following purchases made on amextravel.com: scheduled flights, prepaid hotel purchases (including hotels and flight+hotel packages), minus returns and other credits. Eligible travel purchases do NOT include non-prepaid hotel bookings, car rentals and cruises, hotel group reservations or events, ticketing service, cancellation or other fees, interest charges, purchases of travelers checks, purchases or reloading of prepaid cards, or purchases of other cash equivalents. To be eligible for the 5x Membership Rewards® points, you must both reserve and charge the travel purchase with the same eligible Platinum Card®. To modify a reservation, you must cancel and rebook your reservation. You can cancel and rebook your reservation on amextravel.com or by calling a representative of amextravel.com at 1-800-297-2977.

Cancellations are subject to hotel cancellation policies. If hotel reservations are made or modified directly with the hotel provider, the reservation will not be eligible for this 5X Membership Rewards® point benefit. Bonuses you may receive with your Card on other purchase categories or in connection with promotions or offers from American Express may not be combined with this benefit. Merchants are assigned codes based on what they primarily sell. A purchase will not qualify for additional points if the merchant's code is not eligible. The benefits associated with the Additional Card(s) you choose may be different than the benefits associated with your basic Card.

Your Platinum Card® from American Express will get 4 additional points (for a total of 5 points) on the first \$500,000 on eligible air purchases of scheduled flights made directly with a passenger airline or through American Express Travel (via the phone by calling 1-800-525-3355 or online via amextravel.com) per calendar year. See membershiprewards.com/terms for the Membership Rewards program terms

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 Centurion® Lounge: Morgan Stanley Platinum Card Members have unlimited complimentary access to all locations of The Centurion Lounge. Gold Card and Green Card Additional Cards on your Morgan Stanley Platinum Card account are not eligible for complimentary access. Card Members may bring up to two (2) companions into The Centurion Lounge. To access The Centurion Lounge, the Card Member must present The Centurion Lounge agent with the following upon each visit: his or her valid Card, a boarding pass showing a confirmed reservation for same-day travel on any carrier and a government issued I.D. Failure to present this documentation may result in access being denied. Card Members will not be compensated for changes in locations, rates or policies. A Card Member must be at least 18 years of age to enter without a parent or legal guardian. For locations with a self-service bar, the Card Member must be of legal drinking age in the location's jurisdiction to enter without a parent or legal guardian. Must be of legal drinking age to consume alcoholic beverages. Please drink responsibly. American Express reserves the right to remove any person from the Lounge for inappropriate behavior or failure to adhere to rules, including, but not limited to, conduct that is disruptive, abusive or violent. Access is subject to space availability. Hours may vary by location and are subject to change. Amenities vary among The Centurion Lounge locations and are subject to change. Services and amenities in the Lounge are complimentary, however you are responsible for any purchases and/or servicing charges you authorize our Member Services Professionals to perform on your behalf. Some American Express Cards are not eligible for all services provided by Member Services Desk. American Express will not be liable for any articles lost or stolen or damages suffered by the purchaser or visitor inside The Centurion Lounge. Use of The Centurion Lounge is subject to all rules and conditions set by American Express. American Express reserves the right to revise the rules at any time without notice.

Basic Card Members on a Consumer Platinum Card or Centurion account are eligible for Uber VIP and the monthly Amex Benefit ("Amex Benefit"). Additional Centurion Cards are also eligible for the Amex Benefit. To receive this benefit, you must have downloaded the Uber App version 3.363.10000 or later for iOS or version 4.274.10000 or later for Android and your eligible Platinum Card or Centurion Card must be a method of payment in your Uber account. If you are assigned a new Card number, you must update your method of payment in your Uber account. Cards added to your Uber account through a third party such as Apple Pay or PayPal will not be eligible. An eligible Platinum Card or Centurion Card may receive this benefit on one Uber account. If the same Card is added to multiple Uber accounts, only the first Uber account to which the Card is added will receive the benefit. It takes up to 24 hours for the Amex Benefit to be available in Uber Cash after your eligible Card has been added to your Uber account. Uber VIP is available in select cities and is governed by Uber's terms and conditions. The monthly Amex Benefit is found within your Uber Cash balance. In order to use the Amex Benefit, Uber Cash must be turned on. If Uber Cash is turned on when you request a ride, Uber Cash will appear above the confirmation button. If Uber Cash does not appear above the confirmation button, tap on the current payment option and turn on Uber Cash. The Amex Benefit may be applied to all Uber car types and on Uber Eats orders where Uber Cash can be applied. If your Amex Benefit in your Uber Cash balance does not satisfy the cost of your ride or order, the primary payment method on your Uber account will be charged for the difference. The Amex Benefit will not apply to previous Uber transactions and cannot be used when paying with an uberFAMILY profile. New and existing Uber users are eligible. Uber will apply the Amex Benefit at the point of sale and it will be displayed on your email receipt. There is no limit to the number of transactions you may apply your Amex Benefit to each month, up to a total of \$15 per month (up to a total of \$35 in December). The Amex Benefit in Uber Cash may only be applied within the United States. Your monthly Amex Benefit expires at 11:59 PM Hawaii Standard Time on the last day of each month. Unused balance in Uber Cash from your Amex Benefit will not carry over to the following month. Your Amex Benefit will be applied for the month in which the transaction is completed. If a transaction is eligible for another promotion that you have added to your Uber account, the promotion will be applied before your Amex Benefit. Certain other types of balances in Uber Cash may be applied to the cost of your ride or order prior to your Amex Benefit in Uber Cash. For purposes of fulfilling upon this benefit, American Express will share with Uber certain information about your Card, including the Card type, and updated Card information from time to time. If you do not wish to participate in this program, please call the number on the back of your Card. If you do not see the Amex Benefit in Uber Cash by 5:00 PM Hawaii Standard Time on first of the month, simply call the number on the back of your Card.

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>.

\$550 Annual Engagement Bonus for Platinum CashPlus accounts may be received if 1) you are the Basic Card Member of the Platinum Card from American Express Exclusively for Morgan Stanley (the Basic Card Member is defined as the primary account holder); or 2) you spend at least \$100,000 during the calendar year across Morgan Stanley Debit Cards associated with Platinum CashPlus Accounts in your ALG. Each ALG is only eligible for one bonus per calendar year. For more information please refer to the CashPlus Account Disclosure Statement.

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>.

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

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.

Reserved clients are eligible for unlimited ATM fee rebates and Non-Reserved clients are eligible for up to \$200 in annual ATM fee rebates per calendar year. CashPlus clients receive unlimited ATM fee rebates worldwide. 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

Mastercard benefits and full Debit Card terms and conditions can be found at <https://www.morganstanley.com/wealth/services/pdfs/debitcardstc.pdf>.

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