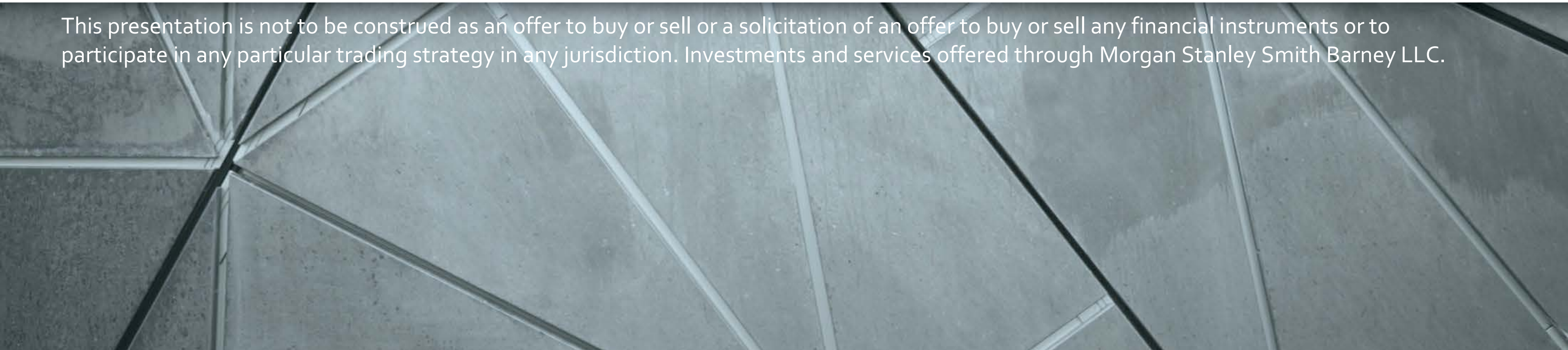
WEALTH MANAGEMENT

Morgan Stanley

Alternative Investments



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Alternative Investments – Contents

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Introducing Morgan Stanley Alternative Investments

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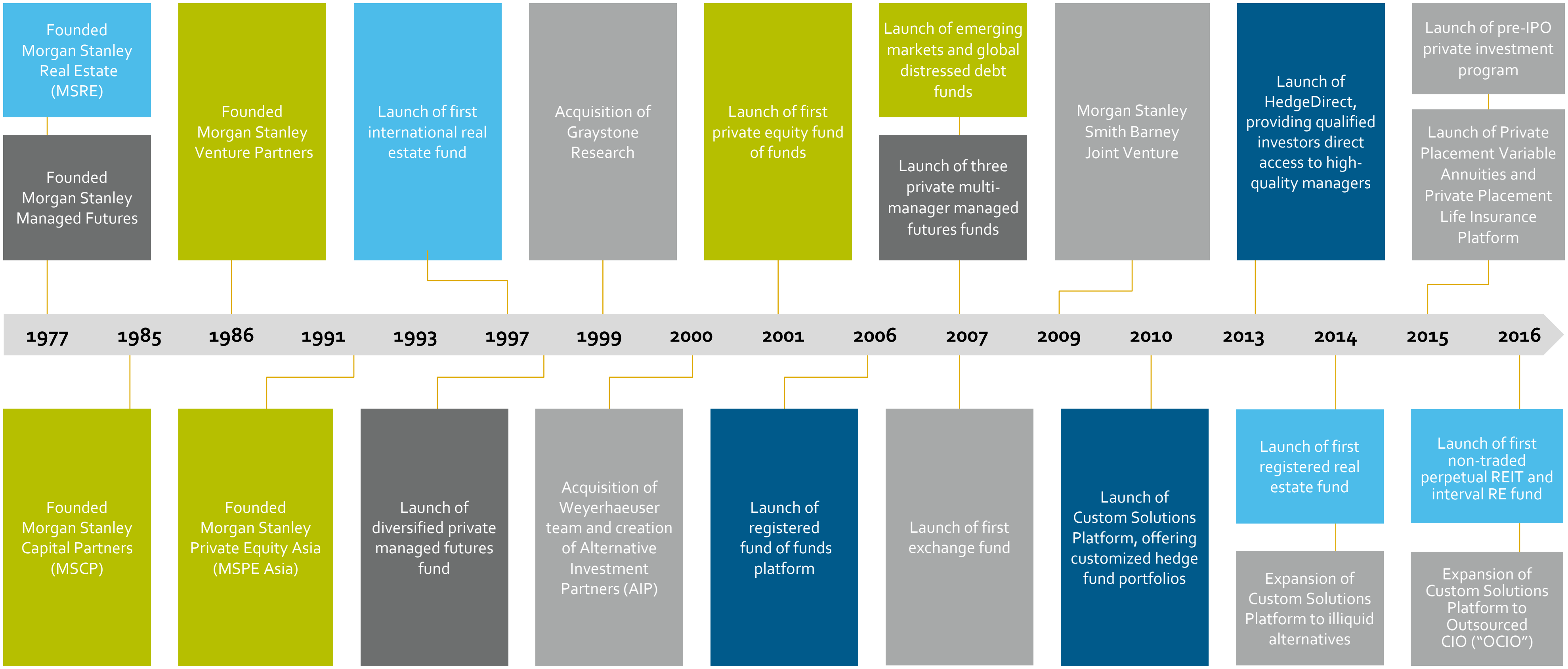
Our Commitment to Alternative Investments

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.



Founded Morgan Stanley Real Estate (MSRE)

Founded Morgan Stanley Managed Futures

Founded Morgan Stanley Venture Partners

Launch of first international real estate fund

Acquisition of Graystone Research

Launch of first private equity fund of funds

Launch of emerging markets and global distressed debt funds

Launch of three private multi-manager managed futures funds

Morgan Stanley Smith Barney Joint Venture

Launch of HedgeDirect, providing qualified investors direct access to high-quality managers

Launch of pre-IPO private investment program

Launch of Private Placement Variable Annuities and Private Placement Life Insurance Platform

1977 1985 1986 1991 1993 1997 1999 2000 2001 2006 2007 2009 2010 2013 2014 2015 2016

Founded Morgan Stanley Capital Partners (MSCP)

Founded Morgan Stanley Private Equity Asia (MSPE Asia)

Launch of diversified private managed futures fund

Acquisition of Weyerhaeuser team and creation of Alternative Investment Partners (AIP)

Launch of registered fund of funds platform

Launch of first exchange fund

Launch of Custom Solutions Platform, offering customized hedge fund portfolios

Launch of first registered real estate fund

Expansion of Custom Solutions Platform to illiquid alternatives

Launch of first non-traded perpetual REIT and interval RE fund

Expansion of Custom Solutions Platform to Outsourced CIO (“OCIO”)

Real Estate and Real Assets | Hedge Funds | Private Equity | Managed Futures | Other

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Investment Solutions: Our Unique Alternatives Platform

- **An array of proprietary and third-party Alternative Investments,** including: Hedge Funds, Funds of Funds, Managed Futures, Real Estate, Private Equity, Private Credit and Exchange Funds
- **Exclusive access to** funds that may otherwise only be available to institutional investors
- **Lower investment minimums** across asset classes that are tailored to a variety of client segments
- **The Global Investment Manager Analysis (GIMA) team** adheres to a rigorous due diligence process to provide product agnostic advice
- **Leading fund managers:** Our Hedge Fund platform has a strong record of choosing high quality funds

DEPTH…
AND BREADTH

Approximately

$59.3
BILLION

in client assets under management or supervision[1]

DIVERSIFICATION

250+

Alternative funds available[1]

DUE DILIGENCE

The **GIMA** team has approximately **20 investment and operational due diligence analysts** dedicated to Alternative Investments[2]

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1. Source: Morgan Stanley Wealth Management Alternative Investments Group. As of January 31, 2017.
2. Source: Morgan Stanley Global Investment Manager Analysis team. As of January 31, 2017.

Alternative Investments are not suitable for all investors and are only available to qualified investors.
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A Global Network of Alternative Investment Offerings

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 managers[1] in the industry.

THE CARLYLE GROUP

OAKTREE

Goldman Sachs Asset Management

Blackstone

Morgan Stanley INVESTMENT MANAGEMENT

SKYBRIDGE CAPITAL

EnTrustPermal

BLACKROCK®

ARES

ALKEON CAPITAL MANAGEMENT

KKR

YORK CAPITAL MANAGEMENT

IRONWOOD

NEUBERGER BERMAN

GRIFFIN CAPITAL SECURITIES guardians of wealth

APOLLO MANAGEMENT, L.P.

Man

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[1] While all the managers identified here have been offered through our platform in the past, and we expect to continue to offer them in the future, at any given point in time a manager may not have a fund available for investment through our platform.

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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.

Alternative Investments	Traditional Investments
Absolute performance objective[1]	Relative performance objective[1]
Performance dependent primarily on alternative investment manager's skill	Performance generally dependent primarily on market returns
May use leverage	Limited or no leverage
Historically low to moderate correlation with market indices	Historically high correlation with market indices
Typically have reduced liquidity ranging from monthly to 12+ year lock-ups	Typically offers daily liquidity
Generally higher fees, which may include performance fees[2]	No performance fees but may include fixed management fees for professional management

Source: Morgan Stanley Wealth Management Global Investment Committee.

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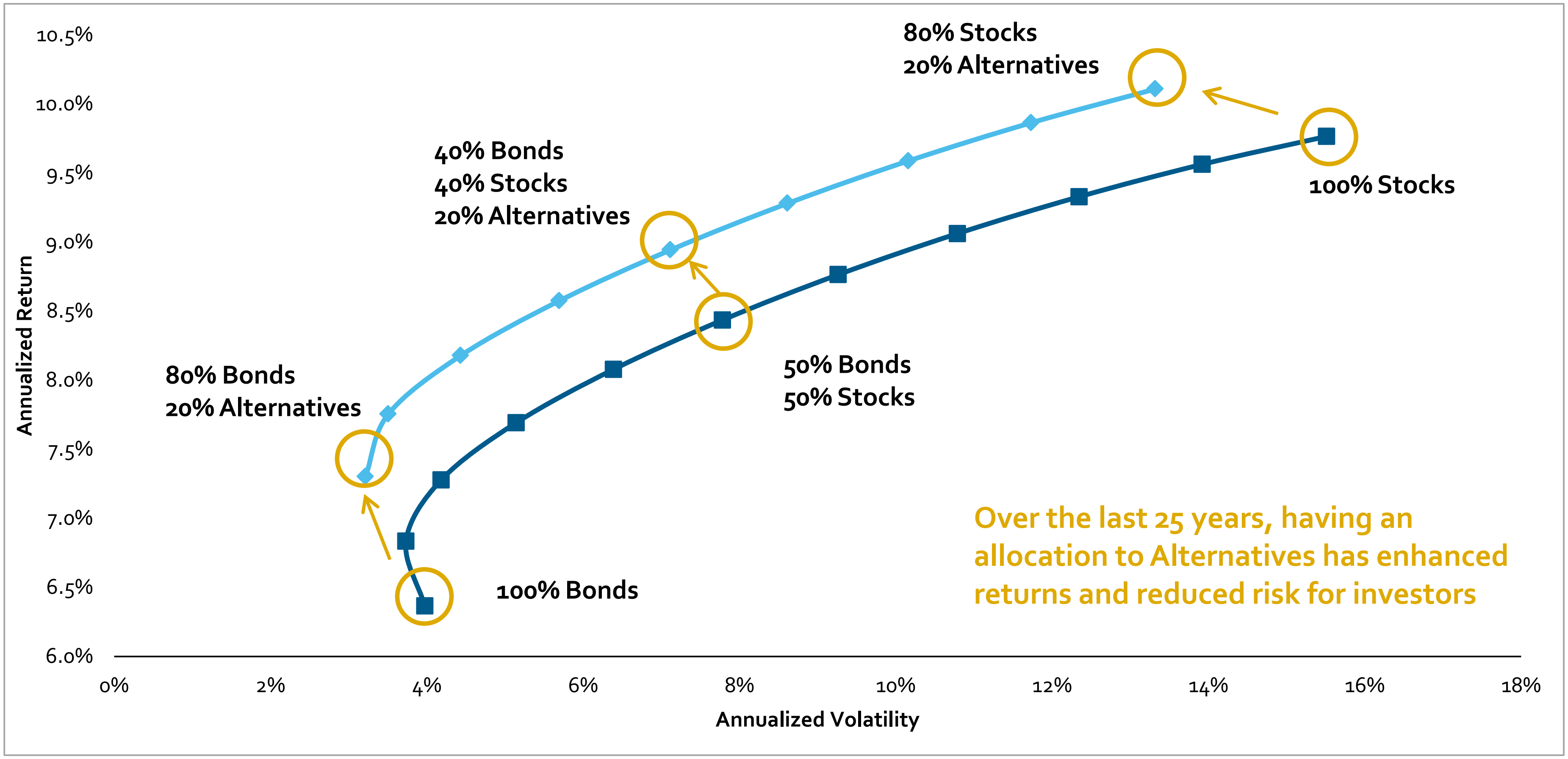
Adding Alternatives Exposure to a Portfolio May Reduce Volatility and Potentially Increase Returns

Risk and Return Trade-Off With and Without Alternatives

Data as of January 1, 1990 to December 30, 2016



Over the last 25 years, having an allocation to Alternatives has enhanced returns and reduced risk for investors

Source: Bloomberg, Morgan Stanley Wealth Management GIC, Thomson ONE. Private equity index data sourced from Thomson ONE's Cambridge Associates benchmarking database and is represented by Buyout, Distressed, Growth Equity, Mezzanine, Private Equity Energy, Upstream Energy & Royalties and Venture Capital. Private Equity data subject to 5-month lag; therefore, all asset classes are depicted as of 1Q 2016 for consistency. Private equity returns are net to limited partners. Stocks are represented by the S&P 500 Total Return Index. Bonds are represented by Barclays US 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 suitable for all investors.

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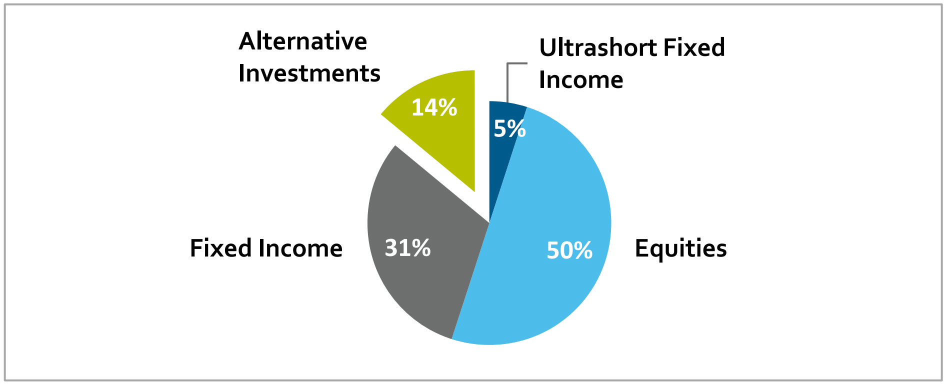
Global Investment Committee: Alternative Investments Strategic Asset Allocation

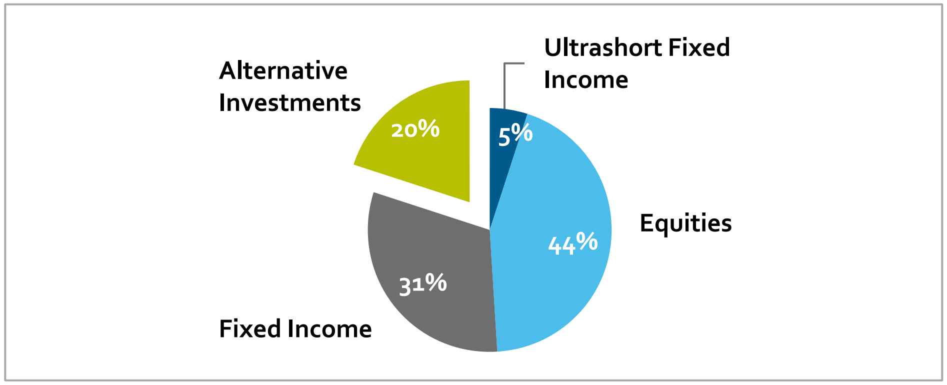
- The Morgan Stanley Wealth Management Global Investment Committee (GIC) continually monitors developing economic and market conditions, reviews tactical outlooks, recommends model portfolio weightings, and also produces a suite of strategy, analysis, commentary, other reports and broadcasts
- Depending 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 Allocation[1]

<$25MM in Investable Assets



>$25MM in Investable Assets



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1. As of August 12, 2016. 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: 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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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.

The Firm maintains an open architecture advisory platform, which includes a wide variety of investment products – including alternatives, separately managed accounts, mutual funds and exchange-traded funds – across most asset classes.

THE GLOBAL INVESTMENT MANAGER ANALYSIS TEAM CONSISTS OF:

The team comprises over 45 professionals dedicated to manager analysis, with an average industry experience of 17 years within traditional long-only and alternative investment products

Within the traditional product group, ~30 investment analysts, specialized by asset class, review and monitor a broad universe of investment products that are offered through the firm's various investment advisory programs

The alternatives team consists of ~20 investment and operational due diligence analysts who provide product-agnostic advice

In addition, GIMA works closely with ~30 analysts focused on single-manager hedge funds from within the Morgan Stanley Investment Management group

All information as of May 2016 and subject to change.

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The GIMA Team Utilizes a Robust Alternative Investments Due Diligence Process

The Global Investment Manager Analysis (GIMA) team works closely with Morgan Stanley Investment Management to conduct initial and ongoing due diligence.

Whether you’re considering an investment in hedge funds, funds of funds, private equity funds, managed futures funds, real estate funds or other special opportunity investments that are approved for distribution on the Wealth Management platform, you can have confidence in the rigorous due diligence process our teams employ.

Quantitative and Qualitative Analyses

- Historical performance metrics
- Statistical measures
- Peer group comparisons
- Onsite manager visits
- Documentation review

Operational Review

- Evaluate business risk
- Infrastructure
- Compliance & controls
- Business continuity
- Quality of third party providers

Approval of New Funds

- GIMA reviews each proposed investment vehicle
- Funds are then brought to an independent product review committee for approval

Ongoing Monitoring

- Analysts monitor funds and managers

Note: Morgan Stanley Investment Management provides due diligence on most third-party single manager hedge funds. In limited instances, third parties provide due diligence.

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The GIC Categorizes Alternatives into Five Buckets

GIC

Alternatives Categories

REAL ASSETS

Commodities, Precious Metals/Gold, MLPs, REITs

ABSOLUTE RETURN ASSETS

Equity Market Neutral, Relative Value, Unconstrained F.I.

PRIVATE INVESTMENTS

Private Equity, Private Credit, Private Real Estate

EQUITY HEDGE ASSETS

Global Macro, Managed Futures, Funds of Funds

EQUITY RETURN ASSETS

Equity Long/Short, Event Driven/ Credit, Distressed Credit

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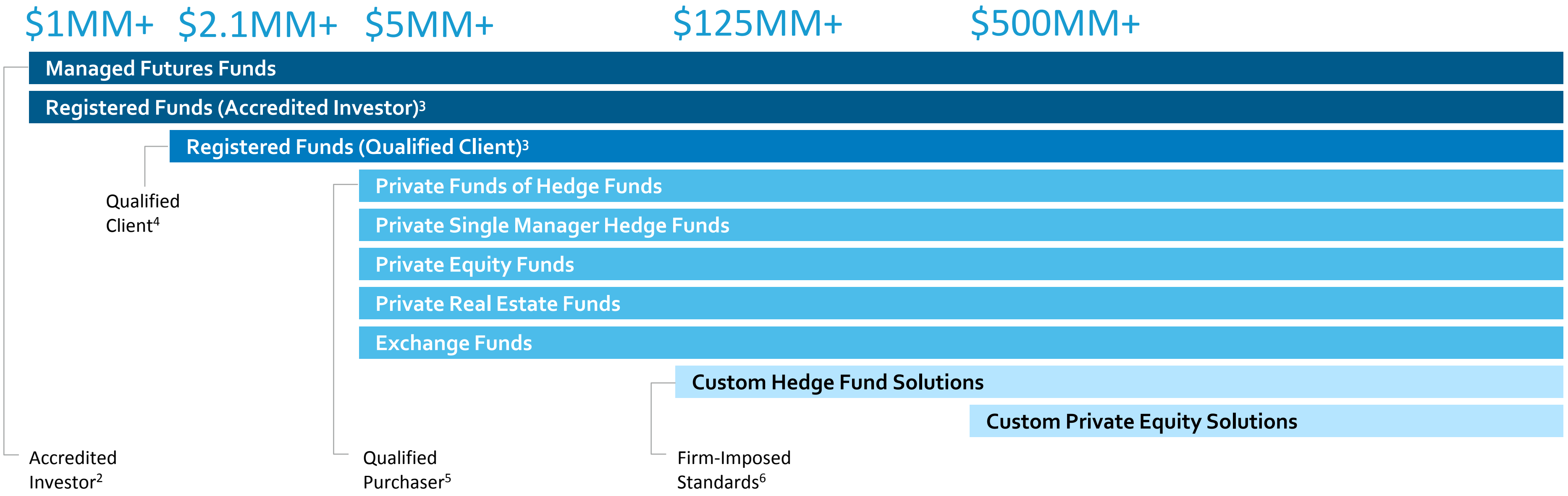
Alternative Investments Eligibility

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 eligibility[1] to purchase alternative investments is typically based on the client's net worth, or as applicable, net investable assets, as shown in the chart below:

Client Net Worth/Net Investable Asset Minimums



$1MM+ $2.1MM+ $5MM+ $125MM+ $500MM+

Managed Futures Funds

Registered Funds (Accredited Investor)[3]

Registered Funds (Qualified Client)[3]

Private Funds of Hedge Funds

Private Single Manager Hedge Funds

Private Equity Funds

Private Real Estate Funds

Exchange Funds

Custom Hedge Fund Solutions

Custom Private Equity Solutions

Qualified Client[4]

Accredited Investor[2]

Qualified Purchaser[5]

Firm-Imposed Standards[6]

1. Eligibility does not imply suitability. 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.
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 include Registered Funds of Hedge Funds; funds that rely on a Qualified Client standard include Registered Single Manager Hedge Funds and Registered Private Equity Funds.
4. Funds that rely on a Qualified Client standard require an individual or entity to have a minimum net worth of $2 .1 million, exclusive of primary residence, or have at least $1 million invested under management with the manager of the fund.
5. Funds that rely on a Qualified Purchaser standard must meet Accredited Investor standards, and require minimum net investable assets of $5 million for an individual, and $25 million for an entity.
6. In addition to meeting Accredited Investor and Qualified Purchaser standards, these funds are subject to firm-imposed higher eligibility standards.

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Morgan Stanley Investment Management

- Morgan Stanley Wealth Management collaborates with Morgan Stanley Investment Management to deliver several offerings to our clients including hedge funds, funds of funds, private equity, private credit and real estate products
- Morgan Stanley Investment Management believes investors benefit from the best of both worlds: extensive, global resources seeking the best investment ideas, and independent decision-making by a fully aligned team

Long Experience and Track Record	• Access to members of a team with a history of over 40 years of investing in alternatives • Manage and advise $93 billion[1]
Deep Network and Access	• Reputation as partner of choice for alternative investments • Experienced, high-quality investment teams leverage proprietary technology
Specialized Resources	• Strategy-specific portfolio managers and analysts • More than 200 investment, client service and operations professionals
Broad Array of Solutions	• Full range of core strategies across investment vehicles • Direct and multi-manager funds • Customized solutions • Secondaries, opportunistic and niche strategies to complement core holdings

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[1] Source: Morgan Stanley Investment Management. Data as of March 30, 2016. Fund of Fund assets represent assets under management and assets under supervision. Direct private investing assets represents the basis on which the firm earns management fees, not the market value of the assets owned.

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Hedge Funds Platform

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Hedge Funds Platform Overview

Single manager hedge funds offer investment flexibility through the use of trading strategies such as short selling, options and other derivative instruments, as well as hedging techniques and the use of leverage.[1] Managers can exercise judgment without most traditional constraints, offering the ability to be opportunistic in changing market environments.

	HEDGEPREMIER PLATFORM	HEDGEDIRECT PLATFORM	HEDGE FUND SOLUTIONS PLATFORM
Offerings[2]	• Offers access to high quality single manager hedge funds at lower investment minimums on a placement and advisory basis • Selection of ~25 open funds • ~$4B in assets under management	• Offers direct access to high quality managers, typically at stated management fees and lower investment minimums than would typically be required on a direct investment • Selection of ~30 open funds • ~$3B in assets under management	• Offers direct investment in high quality single manager hedge funds and customized portfolios on an advisory basis[3] • Selection of ~65 open funds • ~$4B in assets under management and assets under advisement
Eligibility	• Accredited Investor and Qualified Purchaser (generally $5MM net investment assets for an individual, $25MM for an entity)	• Accredited Investor and Qualified Purchaser (generally $5MM net investment assets for an individual, $25MM for an entity) • Selection of registered funds may be available for those meeting Accredited Investor and Qualified Client ($2.1MM net worth) standards	• Single Fund Investments: Accredited Investor and Qualified Purchaser (generally $5MM net investment assets for an individual, $25MM for an entity) • Customized Portfolios: Generally requires $100MM in assets
Minimum Investment	• $100K per each fund	• Generally $250K per fund; $50K for selection of registered funds • Selection of registered funds: $50k minimum	• Single Fund Investments: $1MM+ • Customized Portfolios: $25MM+
Additional Information	• Morgan Stanley follows a rigorous investment and operational due diligence approach for all approved investment opportunities	• Morgan Stanley follows a rigorous investment and operational due diligence approach for all approved investment opportunities	• Customized portfolios are created to meet client-specific investment goals as a stand alone portfolio or as a complement to a broader portfolio of assets • Construction of the portfolio includes: – Identifying client's investment objectives – Selecting managers from HFS approved hedge funds – Monitoring portfolio performance on an ongoing basis

Note: Morgan Stanley Investment Management is not responsible for sourcing and performing due diligence on single manager hedge funds that are affiliated with Morgan Stanley and its affiliates.

1. Increased flexibility for the manager may increase risks to the investor.
2. AUM and open fund figures as of May 31, 2016; Morgan Stanley Alternative Investments Group.
3. The AIP Hedge Fund Solutions platform is managed by Morgan Stanley Investment Management.

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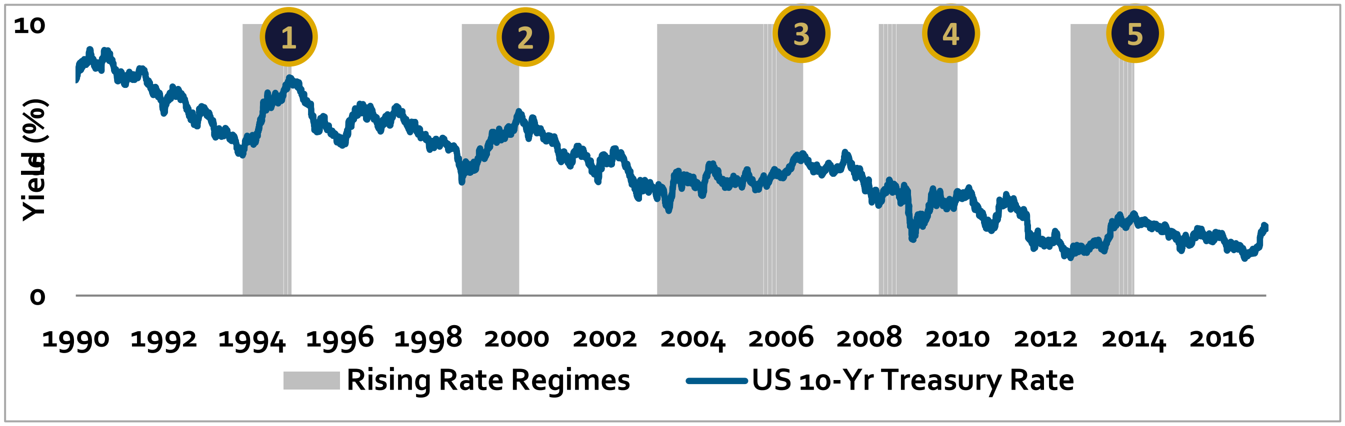
Alternatives Offer Diversification in Challenging Market Environments

Alternatives Outperformance in *Rising Rate* Environments

As of December 30, 2016



Avg. Alts outperformance in rising rate environments	+11%

Alternatives Outperformance in *Equity Bear Markets*

As of December 30, 2016

Avg. Alts outperformance in equity bear markets	+26%

Source: Bloomberg; Goldman Sachs Asset Management. Alternatives are represented by the HFRI FOF Index. Performance illustrated does not reflect fees or expenses, actual investor returns would be lower if these were deducted.

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Funds of Funds Platform

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Funds of Funds Platform Overview

A fund of funds simplifies the process of investing in more than one alternative fund. Each fund of funds incorporates multiple individual managers, letting you broaden your exposure to various asset classes and strategies with a single investment.

OFFERINGS

- Registered Funds
- Private Funds of Hedge Funds
- Discretionary Customized Portfolios

MINIMUM INVESTMENT

- Registered: $50K+
- Private: $100K+
- Discretionary Customized Portfolios: $25MM+

ELIGIBILITY

- Registered: Accredited Investor ($1MM in net investment assets for an individual, $5MM for an entity) or Qualified Client ($2.1MM in net worth)
- Private: Qualified Purchaser ($5MM in net investment assets for an individual, $25MM for an entity)
- Customized Portfolios: $5MM in net investment assets for an individual, $25MM for an entity

ADDITIONAL INFORMATION

- Diversification across different strategies, managers, and investment styles
- Low correlation with traditional securities markets
- Allocations are rebalanced according to a targeted risk budget[1]
- Private Funds provide a K-1 for tax reporting purposes

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[1] An additional layer of fees applies for professional investment allocation.

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Managed Futures Platform

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Managed Futures Platform Overview

Managed futures are limited liability investment vehicles that trade futures, forwards and options on futures and forwards through professional portfolio managers called Commodity Trading Advisors ("CTAs"). Historically, they have tended to perform relatively well when equities and fixed income experience sustained periods of difficult performance, and generally profit when sustainable trends (either up or down) exist.

OFFERINGS

- Managed Futures Premier Platform
  - Single Manager funds
- Multi-Manager Managed Futures Funds

MINIMUM INVESTMENT

- Typically $25K ($10K for IRA/ ERISA, $10K for additional subscriptions)

ELIGIBILITY

- Generally, for most funds, Accredited Investor: a minimum net worth of $1MM (excludes primary residence) for Individuals (or a gross annual income in excess of $200K if single; $300K if joint) and $5MM for Entities

ADDITIONAL INFORMATION

- 100% transparency to the general partner
- Liquidity
  - Monthly subscriptions / redemptions
  - No minimum holding periods, lock ups or gates
  - Generally three business days notice to buy/sell
  - Proceeds delivered approximately 10 business days after month end
- Third-party pricing
- Daily estimated valuations
- Simplified K-1 distribution (before March 15)

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Private Equity / Private Credit Platform

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Private Equity Platform Overview

Private equity funds offer investment opportunities, generally in nonpublic companies, that are not available through traditional public markets. These vehicles may offer both attractive long-term return potential (illiquid) and the opportunity for diversification, as private equity historically has a low correlation to traditional strategies.

OFFERINGS

- Third-Party Managers
- Morgan Stanley Investment Management direct and multi-manager investment funds
  - MSIM Direct Investing Platform
  - MSIM AIP Multi-Manager Platform

MINIMUM INVESTMENT

- Typically $250K+

ELIGIBILITY

- Qualified Purchaser: $5MM in net investment assets for an individual, $25MM for an entity

ADDITIONAL INFORMATION

- Investment types include:
  - Single Manager Private Equity Funds (Primary Investment and Co-investment Opportunities)
  - Funds of Private Equity Funds (Primary Investment, Secondary Opportunities and Co-Investment Opportunities)
- Investment strategies include Venture Capital, Growth Equity, Buyouts, Mezzanine Financing and Distressed/Special Situations

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Private Equity Structures[1,2]

SINGLE MANAGER PRIVATE EQUITY FUNDS	• Access to Primary Fund Investing and Co-investment Opportunities • Private equity funds are typically based on a 'GP-LP' structure, whereby investors (the limited partners, or LPs) commit funds to the private equity fund (the general partner, or GP) • The GP pools LP commitments and uses them to invest in underlying assets. Once the investments are realized, capital flows in the reverse direction back to the LPs as distributions • For direct investments, GPs charge an annual management fee that is generally 1% to 2% of capital commitments during the investment period, generally 5 years, and charge such amount on invested capital thereafter. They may also receive a performance fee, commonly known as carried interest, that is imposed only on returns exceeding a specific threshold. Generally, the performance fee is 20% and is collectible only after investors receive a return of their capital, plus a compounded return of at least 8%
FUNDS OF PRIVATE EQUITY FUNDS	• Access to Primary Fund Investing, Co-investment Opportunities and Secondary Fund Opportunities • Multiple layers of fees; the GP of the fund of funds generally receives a lower management fee and carry because investors are paying fees at the underlying direct level • Large footprint allowing diversification across geographies and strategies

Note: Past performance is not a guarantee of future performance and the value of investments and income from them can fall as well as rise.

1. Governance structures at the company level are designed on a case by case basis to be appropriate. Private equity does not use one-size-fits-all approach to board composition or number of seats.
2. Not all funds of funds have the same structure or invest in all of the same types of private equity investments.

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Private Equity Structures – Underlying[1,2]

PRIMARY FUND INVESTING	• Private equity funds are typically based on a 'GP-LP' structure, whereby investors (the limited partners, or LPs) commit funds to the private equity fund (the general partner, or GP) • The GP pools LP commitments and uses them to invest in underlying assets. Once the investments are realized, capital flows in the reverse direction back to the LPs as distributions
CO-INVESTMENT OPPORTUNITIES	• Invest alongside GPs in individual deals • Typically offered to preferred existing LPs in the fund on a no fee, no carry basis • Increasingly prevalent in current market environment where debt financing is difficult to obtain or prohibitively expensive: GPs are limited by portfolio constraints on single investments in their fund, and have to partner to meet equity requirements
SECONDARY FUND OPPORTUNITIES	• Drivers of secondary activity – Rebalance portfolio exposures – Reduce administrative burden – Exit non-core GP relationships – Regulatory/accounting issues – Distressed sellers in need of liquidity • Sellers in secondary transactions include – Pension funds – Financial institutions/Insurance companies – Endowments and foundations – High net worth individuals and family offices – Hedge funds

Note: Past performance is not a guarantee of future performance and the value of investments and income from them can fall as well as rise.

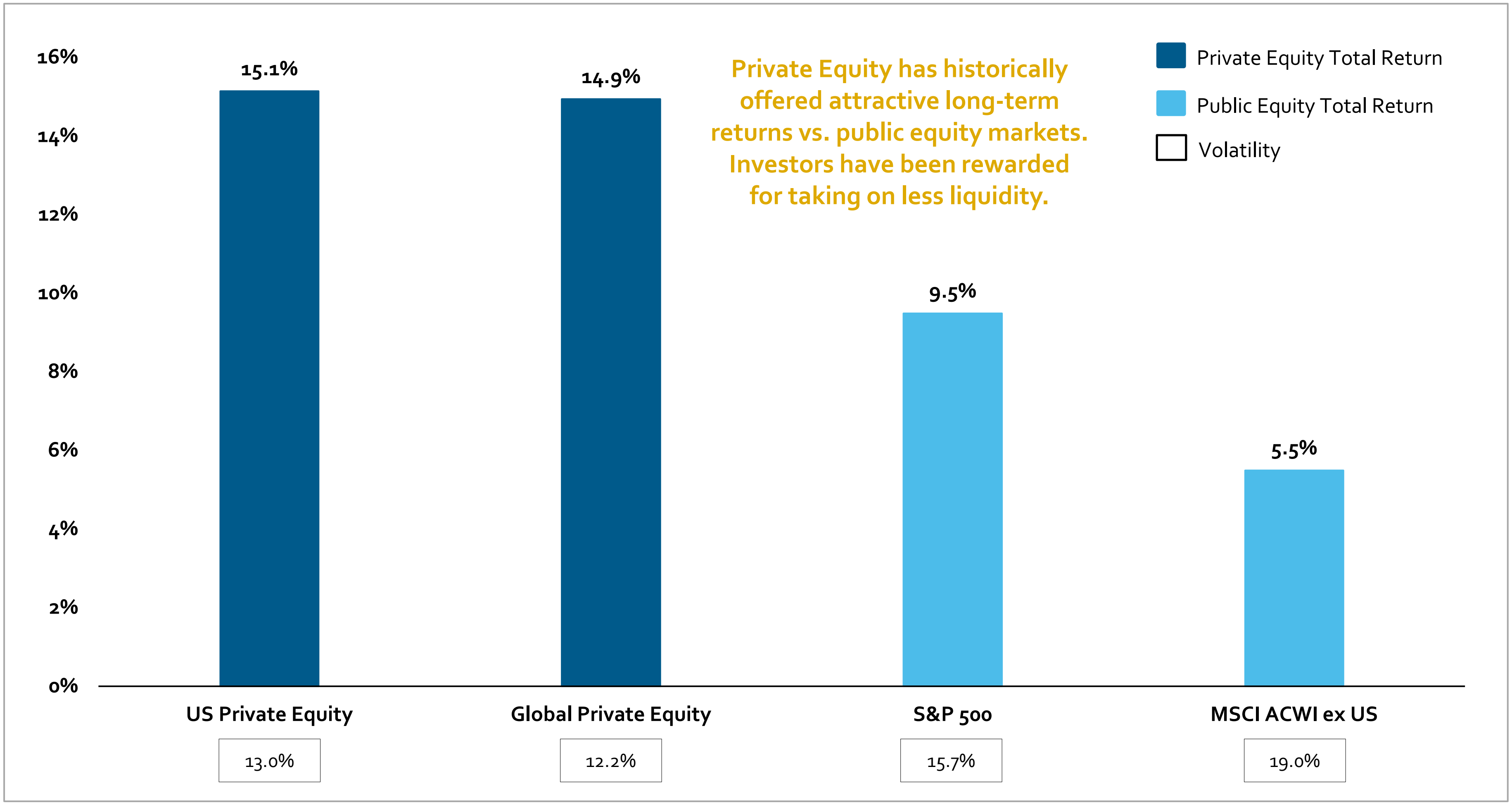
1. Governance structures at the company level are designed on a case by case basis to be appropriate. Private equity does not use one-size-fits-all approach to board composition or number of seats.
2. Not all funds of funds have the same structure or invest in all of the same types of private equity investments.

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

Private Market Performance Has Historically Been Better Than the Public Market

Private Equity[1] Vs. Public Equity: (1990 - 2016)

Annualized Total Returns as of 2Q 2016[2]



Private Equity has historically offered attractive long-term returns vs. public equity markets. Investors have been rewarded for taking on less liquidity.

Source: FactSet, Thomson ONE. (1) Private equity index data sourced from Thomson ONE's Cambridge Associates benchmarking database and is represented by Buyout, Distressed, Growth Equity, Mezzanine, Private Equity Energy, Upstream Energy & Royalties and Venture Capital. (2) US and Global Private Equity data subject to 5-month lag; therefore, all asset classes are depicted as of displayed date for consistency. Private equity returns are net to limited partners.

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Private Credit Platform Overview

Private credit refers to a pool of capital used to make loans to businesses on a bespoke basis or a purchase of existing debt on the secondary market. Private credit presents attractive risk-adjusted investment opportunities for patient capital, augmented by the potential for a reasonably rich illiquidity premium.[1]

OFFERINGS

- Third-Party Managers
- Morgan Stanley Investment Management direct and multi-manager investment funds
  - MSIM Direct Investing Platform
  - MSIM AIP Multi-Manager Platform

MINIMUM INVESTMENT

- Typically $250K+

ELIGIBILITY

- Qualified Purchaser: $5MM in net investment assets for an individual, $25MM for an entity

ADDITIONAL INFORMATION

- Investment strategies include direct lending, structured credit, and distressed investing[2]
- Low correlation with traditional securities markets
- Many private credit funds charge on invested capital throughout the fund term

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1. Structured credit encompasses securities with varying levels of risk/return (e.g., RMBS, CMBS, CLO).
2. Illiquidity premium is the extra yield investors expect to earn for giving up control to liquidate their capital for a certain period of time.

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There Are Significant Distinctions Among the Various Private Credit Strategies

Strategy	**Direct Lending**	**Structured Credit[1]**	**Distressed Investing**
Definition	Provides credit to primarily middle market, non-investment grade private companies	Encompasses a wide range of products that are typically backed by various loans or assets	Involves acquiring stakes in stressed companies at significant discounts with the intention of generating profit post company turnaround

Sub-strategy	**Senior Secured**	**Unitranche**	**Junior / Mezzanine**	**Active / Non-Control**	**Active / Non-Control**	**Control**	**Restructurings / Turnarounds**
Strategy Overview	• Privately negotiated loans • Senior in the capital structure	• Combination of senior and junior debt • Typically, the only debt in the capital structure	• Junior debt in the capital structure • Typically combined with equity warrants	• Securities backed by loans (RMBS, CMBS, CLO, etc.)	• Trading and non influential positions in debt of distressed companies	• Purchasing debt of distressed companies with intention of gaining ownership post reorganization	• Investment in bankrupt or defunct companies or their assets at significant discounts

Source: Morgan Stanley Wealth Management GIMA. (1) Structured credit encompasses securities with varying levels of risk/return (e.g., RMBS, CMBS, CLO).

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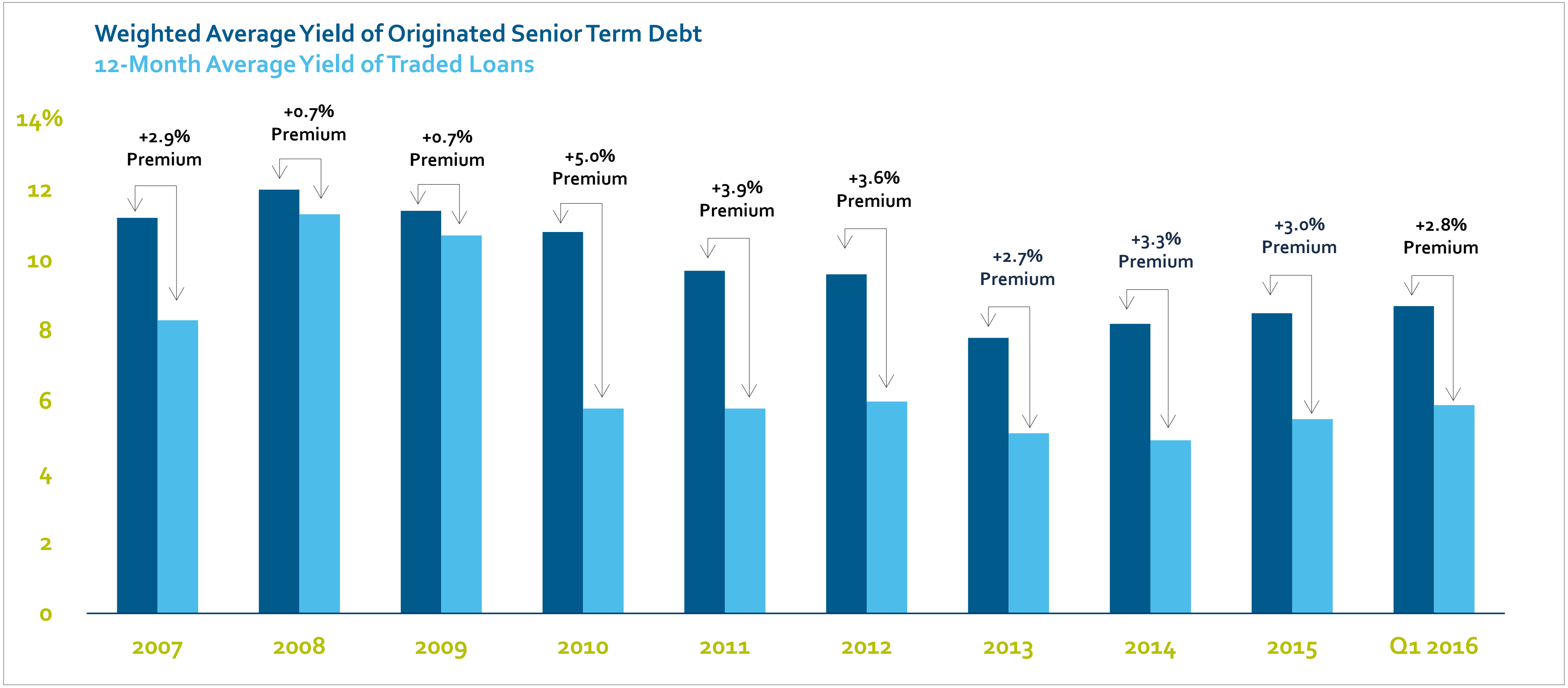
The Illiquidity Premium Is a Major Potential Benefit

Private Investing Enables Investors to Avoid the Often Unnecessary Cost of Liquidity

The "Illiquidity Premium" associated with private investments is expected to compensate investors for giving up access to their capital. It is defined as the extra yield investors expect to earn for giving up control to liquidate their capital for a certain period of time.

Illiquidity Premium Provided by Privately Originated Senior Debt



Source: Morgan Stanley Wealth Management GIMA, Bloomberg, Ares company filings and KKR Credit analysis, KKR Insights: Global Macro Trends "*Adult Swim Only: 2016 Mid-year Update*," June 2016.

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Real Estate Platform

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Real Estate Platform Overview

Real estate funds offer a way to add diversification, as some strategies exhibit low correlation with traditional investments and certain other alternative investments. These funds may offer risk-adjusted returns, while potentially serving as a hedge against inflation.

OFFERINGS

- Third-Party Managers
- MS Real Estate Investing (MSREI)

MINIMUM INVESTMENT

- Typically $250K+

ELIGIBILITY

- Qualified Purchaser: $5MM in net investment assets for an individual, $25MM for an entity

ADDITIONAL INFORMATION

- Investment types include:
  - Single Manager Real Estate Funds (Primary Investment and Co-investment Opportunities)
  - Funds of Real Estate Funds (Primary Investment, Secondary Opportunities and Co-Investment Opportunities)
- Real estate is well suited to core, value-added and opportunistic investing strategies:
  - Potential inefficient pricing in private marketplace
  - Steady cash income return with potential value appreciation

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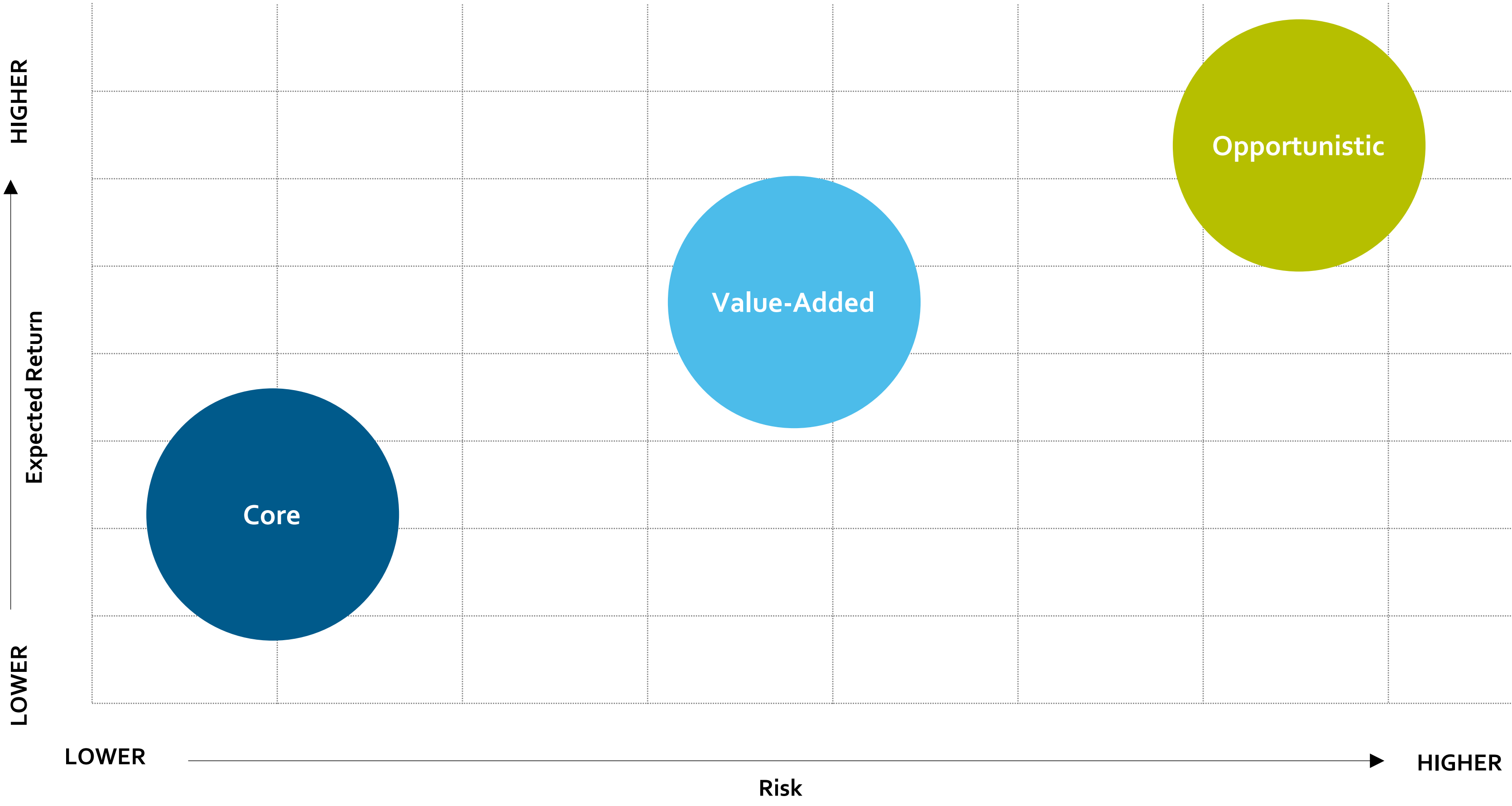
A Range of Real Estate Opportunities to Satisfy Objectives[1]



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[1] There can be no assurance that any targeted or expected return can be realized or that actual returns or performance results will not be materially lower than expected returns. They are based on industry consensus and are being provided for informational purposes only. The expected returns do not reflect the performance of any Morgan Stanley investment.

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A Closer Look at Real Estate Investment Strategies

	CORE	VALUE-ADDED	OPPORTUNISTIC
Investment Vehicle	Diversified commingled open-ended funds and separate accounts in direct real estate	Concentrated commingled closed-ended funds and/or separate accounts in direct real estate	Concentrated commingled closed-ended funds in direct real estate
Investment Approach	Income oriented with a modest appreciation goal, minimal principal risk	Balance of income and appreciation, value gains generated by taking some execution risk	Appreciation oriented with minimal income return
Typical Investment	Stabilized properties, including industrial, apartment, retail, office and limited other emerging property types	Stabilized and partly distressed properties, develop core with exposure to emerging types (e.g., hotel, senior housing)	Develop or seek growth/distress in any type of real estate; can be US- or North America-focused, or consist of global investments
Leverage	Up to 35% of total value	Up to 60% of total value	Up to 80% of total value
Investment Period	Less than twelve months (depending on investment size)	One to three years	One to three years
Liquidity	Private real estate investments have limited liquidity, although core is more liquid than other private real estate types	Commingled funds often have 8 – 10 year terms without liquidity	Commingled funds often have 8 – 10 year terms without liquidity
Time to Liquidate	Funds typically have the potential for quarterly liquidation	End of fund, extremely limited options otherwise	End of fund, extremely limited options otherwise

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Real Estate Industry

- Over the long term, real estate may provide diversification benefits due to historically lower correlations with other asset classes[1]
- Contractual leases may provide greater stability due to cash flow/income streams[1]

Correlation of Total Returns Quarterly, Last 10 Years (As of September 30, 2016)[2,3]

	Stocks	Bonds	Public Real Estate	Private Real Estate
Stocks	1.00	(0.30)	0.78	0.26
Bonds		1.00	(0.01)	(0.20)
Public Real Estate			1.00	0.24
Private Real Estate				1.00

Source: Bloomberg; Stocks (S&P 500 Total Return Index), Bonds (Bloomberg Barclays U.S. Aggregate Bond Index), Public Real Estate (FTSE NAREIT All Equity REITs Total Return Index), and Private Real Estate (NCREIF Property Index). Quarterly data is from September 30, 2006 to September 30, 2016

1. These are the opinions of Alternative Investments as of the date of the presentation and are subject to change at any time due to changes in market or economic conditions.
2. Past performance does not guarantee future results. Real results may vary. Please see Appendix for Risk Considerations and Index definitions.
3. Indexes are unmanaged and investors cannot directly invest in them. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment.

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

Exchange Funds Platform

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Exchange Funds Platform Overview

Exchange funds are private placement vehicles that enable holders of concentrated single-stock positions to exchange those stocks for a diversified portfolio. Investors may benefit from greater diversification without selling stock or triggering a taxable event.[1]

OFFERINGS

- Funds from leading third-party managers, who have been offering exchange funds for over 20 years, are available to help provide investors with broad diversification

MINIMUM INVESTMENT

- Typically $500K+

ELIGIBILITY

- Qualified Purchaser: $5MM in net investment assets for an individual, $25MM for an entity

ADDITIONAL INFORMATION

- Typically consists largely of equities and may also include other qualifying assets, such as real estate or commodities
- Dividends are pooled
- Investors forfeit their stock voting rights
- Investments may be illiquid
- Investments may be leveraged or contain derivatives
- Significant early redemption fees may apply

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[1] See the important tax disclosures at the end of this presentation.

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PPVA and PPLI Platform

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PPVA and PPLI Platform Overview

Private Placement Variable Annuities (PPVA) and Private Placement Life Insurance (PPLI) are insurance solutions that offer investors access to a full complement of alternative investment strategies on a tax-advantaged basis.[1]

OFFERINGS

- A selection of investments structured to replicate hedge funds and other alternative strategies.

MINIMUM INVESTMENT

- PPVA: $500K per fund; $1MM+ platform minimum
- PPLI: $500K per fund; $3MM+ platform minimum

ELIGIBILITY

- Qualified Purchaser: $5MM in net investable assets for an individual, $25MM for an entity

ADDITIONAL INFORMATION

- PPVA and PPLI allow the ability to reallocate among investments tax-free and offer potential investment growth on a tax-deferred basis
- PPLI allows the ability to provide assets to legacy beneficiaries on an income tax-free basis (includes a death benefit – subject to underwriting)

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[1] See the important tax disclosures at the end of this presentation.

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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.

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. In most Morgan Stanley Wealth Management investment advisory accounts, fees are deducted quarterly and have a compounding effect on performance. For example, on an advisory account with a 3% annual fee, if the gross annual performance is 6.00%, the compounding effect of the fees will result in a net performance of approximately 3.93% after one year, 1 after three years, and 21.23% 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.

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 a client-specific suitability analysis or recommendation, or offer to participate in any investment. Therefore, clients should not use this profile 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 suitability 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 a suitable asset allocation for you, whether CGCM is a suitable program for you.

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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 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."

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 suitable 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. NAV is total assets less total liabilities divided by the number of shares outstanding. At the time an investor purchases 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 suitable 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; and Risks associated with the operations, personnel, and processes of the manager. 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. 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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 Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank. 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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.

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.

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 suitable 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. **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.

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Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustration purposes only and do not show the performance of any specific investment. Reference to an index does not imply that the portfolio will achieve return, volatility or other results similar to the index. The composition of an index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error target, all of which are subject to change over time.

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.

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For index, indicator and survey definitions referenced in this report please visit the following: http://www.morganstanleyfa.com/public/projectfiles/id.pdf

Adverse Active Alpha (AAA) is a patented screening and scoring process designed to help identify strong stock picking equity 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 suitable 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 suitable 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 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. Depending upon which advisory program you choose, you will pay an asset-based wrap fee every quarter ("the Fee"), which may be up to 2.5%. In general, the Fee covers investment advisory services, the execution of transactions through Morgan Stanley, custody of the client's assets with Morgan Stanley, and reporting. In addition to the Fee, you will pay the fees and expenses of any funds in which your account is invested. Fund fees and expenses are charges directly to the poos 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 will not be included in the Fee amount in your account statements. 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.

TRAK CGCM Program Asset Allocation Models There are model portfolios corresponding to five risk-tolerance levels available in the TRAK CGCM 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. **TRAK CGCM** is a mutual fund asset allocation program. In constructing the TRAK CGCM 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 TRAK CGCM Program Model Portfolios are specific to the TRAK CGCM program (based on program features and parameters, and any other requirements of Morgan Stanley Wealth Management's Consulting Group).The TRAK CGCM 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.

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.

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.

Margin Loans are investment products offered through Morgan Stanley Smith Barney LLC. Margin Loans are securities based loans, which can be risky, and are not suitable for all investors. **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. **Tailored Lending** is a loan/line of credit product offered by Morgan Stanley Private Bank, National Association, an affiliate of Morgan Stanley Smith Barney LLC.

Express CreditLine ("ECL") is a securities based loan/line of credit product offered by Morgan Stanley Smith Barney LLC. A Tailored Lending credit facility may be a committed or demand loan/line of credit. All LAL and Tailored Lending loans/lines of credit are subject to the underwriting standards and independent approval of Morgan Stanley Private Bank, National Association (or, for LAL, Morgan Stanley Bank, N.A., as applicable). All ECL loans/lines of credit are subject to the underwriting standards and independent approval of Morgan Stanley Smith Barney LLC. LAL, Tailored Lending and ECL loans/lines of credit may not be available in all locations. Rates, terms, and programs are subject to change without notice. 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.

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. 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.

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.

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. A **conforming loan** means a residential mortgage loan offered by Morgan Stanley Private Bank, National Association that is saleable to Fannie Mae or Freddie Mac because it conforms to these entities' guidelines, including, for example, loan amount limits that range from $424,000 to $636,150 for one unit properties, depending on location (and even higher in Hawaii). 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. Thus in deciding whether the pledged-asset feature is appropriate, a Client should consider 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.

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. **3/1, 5/1, 7/1, 10/1 adjustable rate mortgage ("ARM") loans** are based on the 1-Year London Interbank Offered Rate ("LIBOR") with various loan term options.

1-Month Interest only ARM loan is based on 1-Month LIBOR. 1-Month Interest only ARM loan is not available in Maine. The Active Assets Account is a brokerage account offered through Morgan Stanley Smith Barney LLC. The **Morgan Stanley Mobile App** is currently available for iPhone® and iPad® from the App StoreSM and AndroidTM on Google PlayTM. Standard messaging and data rates from your provider may apply. The **Morgan Stanley Credit Card** from American Express or the Platinum Card® from American Express exclusively for Morgan Stanley is only available for clients who have an eligible Morgan Stanley Smith Barney LLC brokerage account ("eligible account"). Eligible account means a Morgan Stanley Smith Barney LLC brokerage account held in your name or in the name of a revocable trust where the client is the grantor and trustee, except for the **following** accounts: Charitable Remainder Annuity Trusts, Charitable Remainder Unitrusts, irrevocable trusts and employer-sponsored accounts. Eligibility is subject to change. American Express may cancel your Card Account and participation in this program, if you do not maintain an eligible account. Morgan Stanley Smith Barney LLC may compensate your Financial Advisor and other employees in connection with your acquisition or use of either the Morgan Stanley Credit Card from American Express or the Platinum Card® from American Express exclusively for Morgan Stanley. The **Morgan Stanley Cards from American Express** are issued by American Express Bank, FSB, 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. The **Morgan Stanley Debit Card** is currently issued by UMB Bank, n.a., 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.

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