Morgan Stanley

Investing With Impact

Create Positive Economic, Social and Environmental Impact

What Is Investing With Impact?

Investments

made with the intention to seek a measurable, positive social and/or environmental impact alongside a market-rate financial return.

Financial Goals

Financial performance driven by economic fundamentals

+

Impact Goals

Positive social and/or environmental outcomes driven by values and mission

=

Investing with Impact

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.

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Investing with Impact: From Niche to Mainstream

Pre-2000s

- **1898:** Quakers Friends Fiduciary Corporation founded and adopts no weapons, alcohol or tobacco investment policy
- **1935:** Morgan Stanley is founded
- **1971:** First ethical investment vehicle launched: the Pax World Balanced Fund
- **1993:** $625 billion in investments screened to exclude South Africa as result of apartheid
- **1999:** Dow Jones Sustainability Index created (DJSI)
- **2000s:** Norway Government Pension and CalPERS (US's largest pension), pledge 100% integration of sustainability in 15-years
- **2000:** Carbon Disclosure Project (CDP) launched to develop a global environmental disclosure system

2000 – Present

- **2006:** UN-supported Principles for Responsible Investment (PRI) is launched for asset owners and managers as a voluntary set of investment principles for incorporating ESG into investment practices
- **2007:** Rockefeller Foundation launches 'Impact Investing' initiative and the term emerges globally
- **2009:** Morgan Stanley forms Global Sustainable Finance to integrate sustainability across core businesses
- **2012:** Morgan Stanley Wealth Management launches the Investing with Impact Platform
- **2013:** Morgan Stanley launches Institute for Sustainable Investing
- **2014:** Signatories of the PRI reaches $45 trillion AUM
- **2015:** Department of Labor ruling facilitated the ability for employers to add sustainable and impact investment fund options to their plan choices; 17 United Nations Sustainable Development Goals launched as a global framework for sustainable development
- **2017:** Morgan Stanley launches Financial Advisor designation to recognize Investing with Impact leadership; UBS commits to directing $5 billion of client assets to impact investments by 2021
- 2018: Morgan Stanley Exceeds 5-Year Investing With Impact Asset Goal, with $25 billion in client assets
- **2019:** Business Roundtable's 181 CEOs, sign "Statement on the Purpose of a Corporation" in a move toward a commitment to all stakeholders
- **2019:** Morgan Stanley launches Morgan Stanley Impact Quotient® a proprietary impact reporting application to help investors understand the environmental and social impact of their investments
- **2020:** An estimated US$17.1 trillion, or 1 in 3 dollars invested in the US use socially responsible investing strategies, representing 42% growth from 2018
- **2020:** Blackrock commits to displaying carbon footprint for all BlackRock mutual funds and commits to divest from companies generating 25%+ of revenues from thermal coal production in active investments by year end
- 2022: Morgan Stanley Wealth Management Investing with Impact Platform celebrated it's 10-year anniversary
- 2023: Platform surpassed $75 billion in client assets; 102 Advisors with Investing with Impact Director designation

● Morgan Stanley

Source: Investing with Impact

For Over a Decade, Morgan Stanley has Charted a Leadership Position in Sustainable and Inclusive Finance

2009	2012	2013	2015	2017	2019	2020	2021	2022
Established cross-firm **Global Sustainability Office (GSO)**	First-of-its-kind Wealth Management **Investing with Impact Platform**	**Institute for Sustainable Investing** established by chairman and CEO	Issued inaugural **Green Bond** to support firmwide climate strategy & solutions	Named the **first Chief Sustainability Officer** on Wall Street Launched **Multicultural Innovation Lab** to invest in diverse founders	Announced our award-winning **Plastic Waste Resolution**[2]	**Institute for Inclusion** established by chairman and CEO 1st Wall Street bank committed to **Net-Zero Financed Emissions** by 2050 Issued **$1Bn Social Bond** to support affordable housing	Committed to **mobilize $1Tn in sustainable solutions** by 2030, including $750Bn in low - carbon solutions	Established **EMEA Sustainability Office**

ESG Investing WINNER AWARDS 2022

Best Bank for Sustainable Finance[(1)]

Strategic Partners and Affiliations

PRI | GIIN | Ceres | ICMA International Capital Market Association | TCFD | IMPACT CAPITAL MANAGERS | ELLEN MACARTHUR FOUNDATION | PCAF | NZBA

Please note that there is currently no legal, regulatory or similar definition of what constitutes a "green" or "social" bond or as to what precise attributes are required for a particular issuance to be defined as green or social. Without limiting any of the statements contained herein, Morgan Stanley makes no representation or warranty as to whether this bond constitutes a green or social bond or conforms to investor expectations or objectives for investing in green or social bonds. For information on characteristics of the bond, use of proceeds, a description of applicable project(s), and/or any other relevant information about the bond, please reference the offering documents for the bond. These bonds are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest-rate risk), the creditworthiness of the issuer and general market liquidity (market risk).

1..ESG Investing Awards 2022 Winners & Finalists, https://www.esginvesting.co.uk/awards/shortlistedfinalists

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Delivering Innovative Sustainable Finance Solutions and Advice For Our Clients, Supported by a Coordinated Firmwide Strategy

FIRMWIDE COMMITMENTS

$1 trillion in Sustainable Finance by 2030, including $750 billion in low-carbon solutions

Net zero financed emissions by 2050

50 million metric tons of plastic waste avoided by 2030

Global Sustainable Office

Expertise across sustainable finance market trends, product innovation, ESG analytics and key themes including climate, plastic waste & inclusive growth

Wealth Management[1]

- $75Bn in assets across 320+ products and 12 model portfolio solutions on Investing with Impact Platform
- $18Bn allocated to products from diverse-owned asset managers
- Award-winning[(3)] and patented [(4)] impact reporting application, **Morgan Stanley Impact Quotient® (Morgan Stanley IQ®)**
- Dedicated Investing with Impact Director network of Financial Advisors

Institutional Securities[2]

- ~$300Bn in green, social and sustainability bonds since 2013 for companies, governments, supranationals & non-profits
- >70% of stocks covered by Morgan Stanley Research incorporate ESG data in analysis
- ESG Sales & Trading solutions including thematic baskets, custom indices, & structured products
- Environmental Products capabilities across Carbon trading, hedging analytics & price forecasts

Investment Management[2]

- $60bn+ labelled sustainable fund assets under management across MSIM and Calvert investment strategies[(5)]
- 670+ engagements with companies on ESG issues in 2021
- A/A+ ratings achieved throughout Principles for Responsible Investment (PRI) assessments

1. Data as of December 2023. 2. Data as of Dec 2022, https://www.morganstanley.com/content/dam/msdotcom/en/assets/pdfs/Morgan_Stanley_2021_Sustainability_Report.pdf. 3. Aite-Novarica Group's Digital Wealth Management Impact Awards (9/2022) based on time period from 1/1/2021–3/31/2022. For criteria & methodology, go to (https://aite-novarica.com/aite-novarica-group-announces-winners-2022-digital-wealth-management-impact-awards). 4. US Pat. No. 11,188,983 5.The AUM figure reference here relates to "Sustainable Core" and "Sustainable Objective and Impact" AUM of Legacy MSIM strategies plus total Calvert Research and Management AUM.

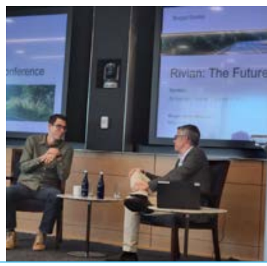
Empowering Clients with Unique Insights on Sustainable and Inclusive Finance

Global Conferences

Annual Sustainable Investing Summit

Annual Multicultural Leadership Summit

Annual Sustainable Futures Conference



ESG Spotlight Events

Podcasts

At Scale: A Sustainability Podcast
Hosted by Audrey Choi, Senior Advisor at Morgan Stanley

Access & Opportunity
Hosted by Carla Harris, Senior Client Advisor

Thoughts on the Market
Perspectives on the forces shaping markets

ESG Matters
Hosted by Morgan Stanley Sustainability Research

Thought Leadership Across Firm Businesses

Morgan Stanley Wealth Management

Morgan Stanley Institutional Securities Group

Morgan Stanley Investment Management

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As a Global Financial Services Firm, We are Committed to Sustainable and Inclusive Business Practices

Capacity Building	**Advancing the field of sustainable investing** • Sustainable Solutions Collaborative [1] • Inclusive Ventures Lab [2] • Annual Sustainable Investing Fellowship and Challenge • Ongoing employee training on sustainability, climate change & inclusion
Sustainable Business Operations	**Integrating ESG considerations across business functions** • **Risk Management:** consideration of physical and transitional climate risks; Environmental & Social Policy Statement • **Finance:** Shareholder engagement on topics including climate and Diversity & Inclusion (D&I); Supplier diversity program • Operations: Goal to become carbon neutral by 2022
People Management	**Fostering an inclusive and environmentally conscious culture** • Five pillar D&I strategy focused on accountability, representation, advancement, culture & outreach • Institute for Inclusion brings employees, communities and clients together to create a more equitable and environmentally conscious society
Transparency & Reporting	**Developing investor-focused sustainability disclosure** • Annual sustainability report since 2009, Climate Report, Diversity & Inclusion Report • Early adopter of TCFD and SASB reporting frameworks • Partnership for Carbon Accounting Financials (PCAF) Steering Committee member

1. Annual $250,000 award supporting breakthrough concepts focused on systemic solutions for global challenges
2. In-house accelerator promoting financial inclusion and access to capital for early-stage technology companies led by underrepresented founders.

Morgan Stanley's Leadership in Diversity & Inclusion

We at Morgan Stanley have a firm commitment to D&I and valuing diverse perspectives and we continue to demonstrate our leadership through new and existing initiatives.

1 Drive Meaningful Change within Morgan Stanley & Communities

- In 2020, Morgan Stanley launched the Institute for Inclusion, bringing employees, communities and clients together in a shared commitment to creating a more equitable society by:
  - **Investing in underserved communities** to improve economic outcomes.
  - **Advancing equity through giving** by leveraging philanthropic efforts to help address and eliminate systemic inequities for underrepresented groups and communities.
  - **Promoting workplace diversity and inclusion** to attract, develop and retain individuals with diverse backgrounds and perspectives, and to drive a culture of inclusion for all colleagues.

2 Invest in Future Leaders

- Inequities in access to higher education can impact diverse students' ability to grow generational wealth.
  - Morgan Stanley's HBCU Scholars Program, started in 2021, provides needs-based, four-year scholarships to students at Howard University, Morehouse College and Spelman College, covering the full cost of attendance annually.
  - Scholars are also offered career-readiness programs by the Firm that complement their curriculum on campus.
- In 2021, Morgan Stanley launched The Equity Collective, an industry leading group of Wealth Management and Asset Management businesses who have come together to educate, empower and develop the next generation of diverse leaders in the finance industry.

3 Support Entrepreneurs

- Established in 2017, the Morgan Stanley Inclusive Ventures Lab is the firm's award-winning, in-house start-up accelerator program for underrepresented founders. The Lab provides underrepresented founders of tech and tech-enabled companies with:
  - **Content** through tailored curriculum
  - **Capital** from a Morgan Stanley financial contribution
  - **Connections** to Morgan Stanley's global network of professionals and investors

Morgan Stanley's Climate Strategy

Integrating climate considerations across the Firm's businesses, risk management and operations

A Four Pillar Climate Strategy

Transition To A Low-carbon Economy

- First major U.S. headquartered global financial services firm to commit to achieving **net-zero financed emissions** by 2050:
    - Set sector-based **2030 financed emissions targets** for Auto Manufacturing, Energy, and Power
- Commitment to mobilize **$750Bn** to support **low-carbon solutions** by 2030

Climate Risk

- Climate change considerations integrated into the Firm's **risk management and governance processes** under the Chief Risk Officer
- Climate risks overseen by the **Risk Committee of the Firm's Board of Directors**

Transparency

- Only major U.S. headquartered global financial services firm on **Partnership for Carbon Accounting Financials (PCAF)** Steering Committee
- **TCFD report** published since 2020

TCFD PCAF SASB

Operational Resilience

- **Carbon neutrality** across global operations by 2022
- **Source 100%** of global operational electricity needs from **renewable sources**

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Morgan Stanley Plastic Waste Resolution

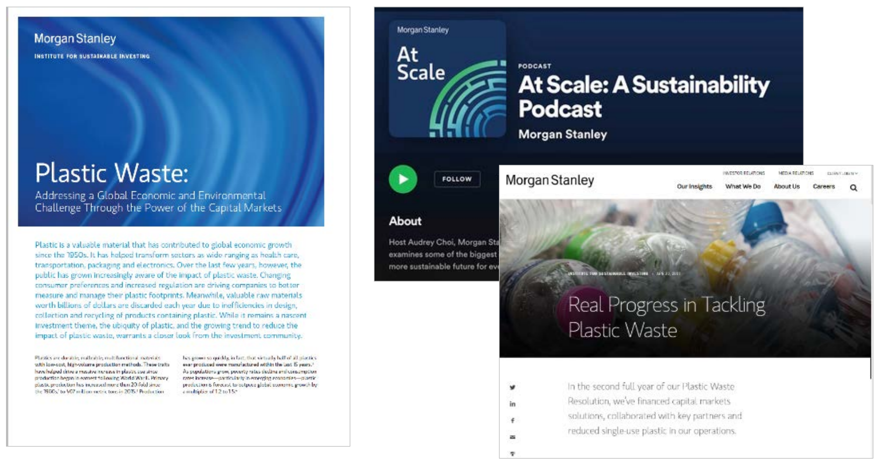
Helping facilitate the prevention, reduction and removal of 50 million metric tons of plastic waste from rivers, oceans, landscapes and landfills by 2030

RESULTS

13 million metric tons

of plastic waste diverted from the environment and landfills as of year-end 2021, through relevant transactions, investments, and own operations [1]

INSIGHTS



AWARDS

ESG Investing WINNER AWARDS 2022

Morgan Stanley Plastic Waste Resolution awarded ***Most Innovative ESG Initiative*** [2]

FIRM STRATEGIC PARTNERS AND AFFILIATIONS

National Geographic | School for Environment and Sustainability, University of Michigan | University of Georgia | Global Plastic Action Partnership | Ellen MacArthur Foundation | Ocean Conservancy | Global Ghost Gear Initiative

1. https://www.morganstanley.com/Themes/plastic-pollution-resolution
2. ESG Investing Awards 2022 Winners & Finalists, https://www.esginvesting.co.uk/awards/shortlistedfinalists/

Mainstream Investors Have a Range of Impact Motivations

MAINSTREAM INVESTORS

Individuals

Investors across generations, especially Millennials and Ultra High Net Worth individuals and families, are seeking to generate a positive legacy with their capital and align investments with impact objectives

Entrepreneurs

Seeking innovative investment options that mitigate risk, have return potential and provide complementary personal portfolio to corporate interests and assets

Religious Institutions

Incorporating faith-based investing guidelines and filing shareholder resolutions to engage with companies and improve corporate behavior

Foundations / Non-Profits

Aligning all pools of capital with the organization's mission statement to maximize positive impact, mitigate risks and drive long term value

Endowments

Seeking risk management, return potential, respond to stakeholder demand and motivated to align investments with the mission statement to maximize positive impact

Donor Advised Funds

Maximize impact of charitable assets by investing in companies that seek to generate positive environmental and social return while waiting to grant out funds

Insurance Companies

Seeking to respond to evolving policy/regulations, and utilize social and governance to identify embedded long-term risk and also seek to benefit from opportunities

Defined Benefit/Defined Contribution Plans

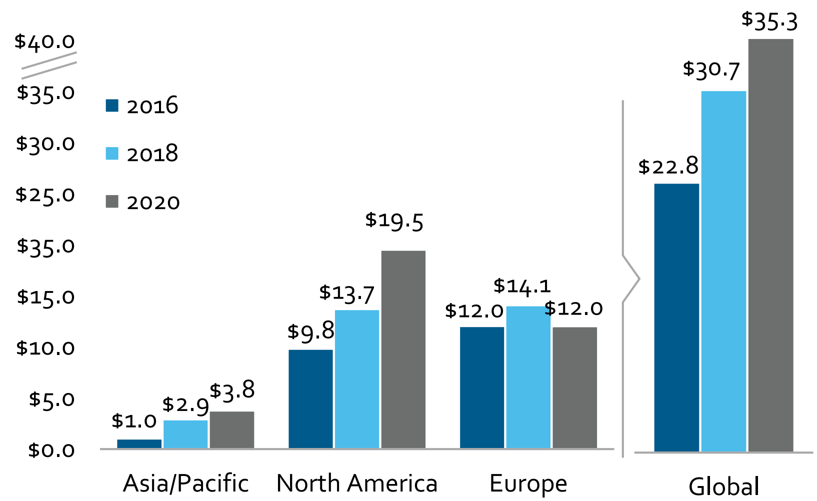
Seeking sustainable retirement investment options to drive long-term value, mitigate risks. Respond to stakeholder demand and attract talented employees to organizations

Investors Care About Investing with Impact

Globally, one in three dollars is invested with a focus on sustainability[1]

- **Individual Investors:** 79% of U.S. active individual investors describe themselves as interested in sustainable investing[(2)]
- **Next Generation Investors:** 99% of millennial active individual investors describe themselves as interested in sustainable investing[(2)]

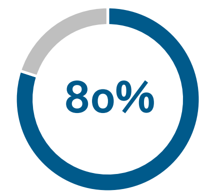
Sustainable Assets by Region (US$ Trillions) [(1)]



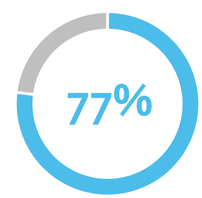
Note: Australasia and Europe both reported a lower proportion of sustainable investing assets relative to total managed assets for 2018 to 2020. This reflects significant changes in the way sustainable investment is defined in these regions, making comparisons with previous versions of this report very difficult, and highlights an evolution of the sustainable investment markets in both regions.

Asset managers cite a number of factors driving growth in sustainable investing practices, with client demand being top of list (Global Average)[(3)]

Client Demand/Investor Pressure	62%
Public Sentiment	50%
Regulatory Developments	48%
Market Performance	37%
COVID-19 Pandemic	21%



80% of all institutional investors already implement sustainable investing strategies in all or part of their portfolios—or plan to do so[(3)]



77% of all institutional investors report increased interest in sustainable investing since May 2020[(3)]

1. GSIA 2020 Trends Report.
2. Morgan Stanley Institute for Sustainable Investing, "Sustainable Signals: Individual Investors and the COVID-19 Pandemic" 2021.
3. Morgan Stanley Institute for Sustainable Investing and Morgan Stanley Investment Management, "Opportunities for Asset Managers to Meet Asset Owner Demands" 2022.

Proof in the Performance

Indices that incorporate environmental, social and governance (ESG) factors have generally performed in line with, or better than, conventional indices. For example, $100 invested in line with the holdings reflected in the sustainable index in 1990 grew to $3,283 versus $2,845 for a traditional index through December 31, 2023.

Annualized Return

May 1, 1990 – December 31, 2023

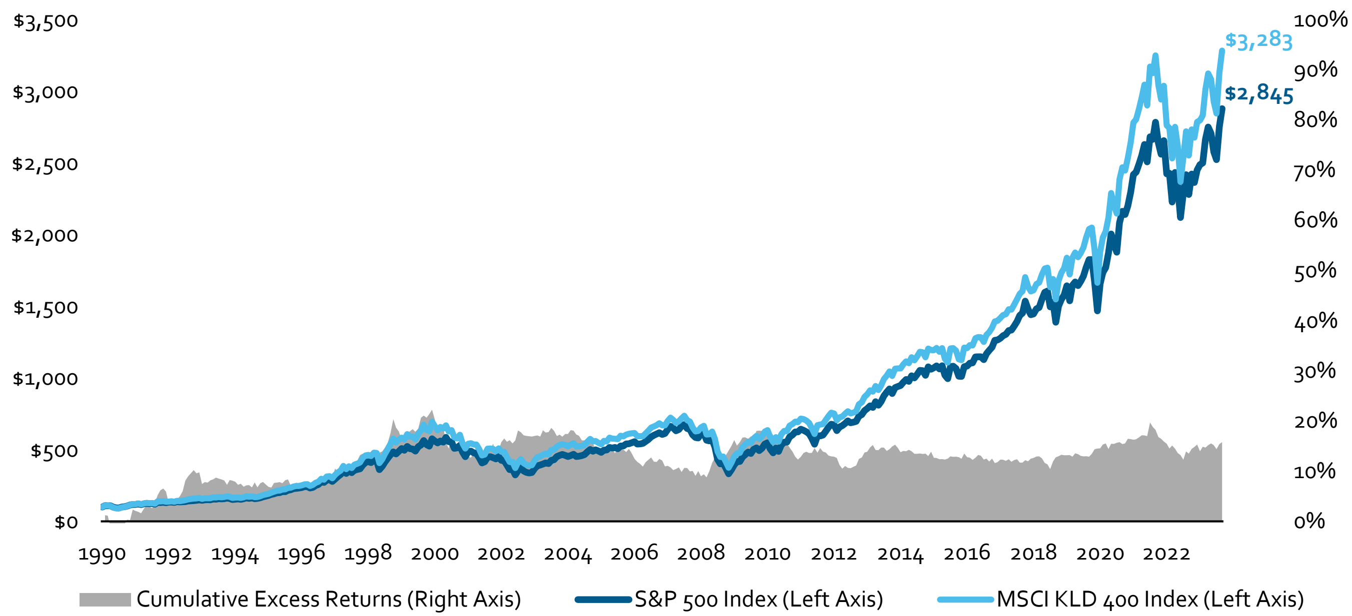
10.9%
MSCI KLD 400 Social Index

10.5%
S&P 500 Index

The MSCI KLD 400 Index of companies that meet **high standards of environmental, social and governance (ESG) criteria.**

May 1, 1990 – December 31, 2023 (Single Computation)

Cumulative Return (%)



1. Source: Bloomberg, MSCI, Morgan Stanley Wealth Management.
2. Past performance is no guarantee of future results. The index returns are illustrative and shown for comparative purposes only. They do not represent the performance of any specific investments. An investor cannot invest directly in an index.

Investing with Impact Offering Delivers an End-to-End Solution

PUBLIC MARKETS | PRIVATE MARKETS

Cash & Cash Equivalents	Sustainable Capital Markets	Single-Stock Opportunities	290+ Third-Party Products		Investing with Impact Portfolio Solutions:		Alternative Investments
Morgan Stanley ESG Money Market Portfolio, & Notes	Green, Blue, Sustainability, & Social Bonds	Morgan Stanley Sustainability Research (MS&CO)	ETFs	Mutual Funds	Impact Solutions Portfolio (MAPS) ($10k Minimum)	Impact Portfolios ($10k Minimum)	MSIM & Custom Alternatives
	Sustainable Structured Products		SMAs	Unit Investment Trust	Diversity Portfolios ($100k/$150k)	MS GIFT Donor Advised Fund	Private Equity & Venture Capital
						Custom Solutions OCIO	Hedge Funds & Funds of Funds

SHAREHOLDER ENAGEMENT + DIVERSE MANAGER OPPORTUNITIES

AVAILABLE THEMATICS

- ✓ Climate Action
- ✓ Gender Lens
- ✓ Racial Equity
- ✓ Faith-based Approaches
  - ✓ Catholicism
  - ✓ Christianity
  - ✓ Judaism
  - ✓ Islam
- ✓ Mission Align 360°

DIFFERENTIATED CLIENT EXPERIENCE

- ✓ More than a decade focus on sustainable finance
- ✓ First platform led by a major U.S. financial institution solely dedicated to sustainable investing across asset classes
- ✓ Values discovery process, investment strategy screener and real-time impact reporting powered by the **Morgan Stanley Impact Quotient®** application
- ✓ Timely content covering key sustainability themes and market trends
- ✓ Solutions available for all client sizes and types

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Impact in Private Markets

Alternative investments create an opportunity to invest in targeted impact solutions

The market for private market impact investments continues to grow

2.5X Increase in average number of impact funds raising money each year in 2019-2021 compared to 2009-2011[2]

3.5X Projected growth in private markets Impact AUM from $180B in 2020 to $650B in 2025[1]

We help you access offerings across multiple impact themes and asset classes

Climate Action: Strategies advancing solutions to combat climate change and transition to a less carbon intensive economy through both scaling renewable energy infrastructure and investing in new climate technologies

Diversity Equity & Inclusion: Strategies investing in diverse-owned companies and funds, as well as strategies that are owned by diverse managers

Improving Lives: Strategies investing in Health, Education, Affordable Housing, Financial Inclusion.

Dedicated resources on Global Investment Manager Analysis (GIMA) Team and the Investing with Impact team partner to track new impact strategies in impact private markets and bring premier opportunities to the Investing with Impact platform

1. Morgan Stanley, How Long Will the Golden Age of Private Markets Last, October 2021
2. PitchBook Data, Inc. Impact Investing Update, December 2022

Our Holistic Approach to Investing With Impact

The Three I's of Impact: Intentionality, Influence and Inclusion

INTENTIONALITY

Intentional investment process that seeks to generate market-rate financial returns alongside positive social and environmental impact in one or more of the following ways:

← **Minimize Objectionable Impact** —— **Generate Targeted Impact** →

Restriction Screening: Reduce or seek to eliminate exposure to companies that detract from intended positive impacts

ESG Integration: Consider environmental, social and governance factors in the investment process

Thematic Solutions: Evaluate companies on revenue generated from products & services that seek to contribute to sustainability solutions

INFLUENCE

Modify the behavior of portfolio companies to seek better social and environmental outcomes and drive industry capabilities through:

Active Ownership can be achieved through management dialogue, strategy setting, proxy voting, resolution filing and filling board seats

Market Building seeks to influence the industry through collaborative affiliations and adopting global frameworks

INCLUSION

Diverse perspectives can help guide the intentional investment process and engagement activities, or influence, through:

Diverse Firm Ownership[1]

and/or

Diverse Representation Across Investment Professionals

1. Morgan Stanley's Global Investment Manager Analysis (GIMA) team, defines diverse asset managers as those with 33% or greater ownership by women and/or racially/ethnically diverse individuals. This definition aligns with the US Equal Employment Opportunity Commission categories and includes: Hispanic or Latino, Black or African American, Asian, American Indian or Alaska Native, or Native Hawaiian or other Pacific Islander.

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How ESG Data Informs Investment Decisions

Environmental, Social and Governance (ESG) data can serve as a tool to better understand risks and opportunities associated with sectors, industries or business activities. Some ESG criteria include, but are not limited to:

ENVIRONMENTAL

CLIMATE DISCLOSURE
Disclosing climate footprint, including greenhouse gas emissions

CLIMATE SOLUTIONS
Generating revenue from renewable and cleaner energy sources, and energy-efficient infrastructure

NATURAL RESOURCE USE
Reducing waste, pollution and stress on water and natural resources

NATURAL RESOURCE SOLUTIONS
Generating revenue from waste and pollution management, sustainable agriculture, sustainable consumer products and conservation efforts

SOCIAL

HUMAN RIGHTS
Protecting human rights through policies and compliance with international norms

EMPLOYEE TREATMENT
Promoting employee welfare through health and safety, diversity & inclusion, good benefits, employee relations and workplace policies

CUSTOMER & SUPPLIER TREATMENT
Promoting product safety, responsible marketing, customer relations, fair competition and supply chain management

EMPOWERMENT SOLUTIONS
Generating revenue from affordable housing, access to clean water, healthcare, nutrition, education, and/or finance

GOVERNANCE

ETHICAL PRACTICES
Strong ethics and anti-corruption record

FINANCIAL TRANSPARENCY
Corporate transparency on taxes, accounting and executive pay

OWNERSHIP & OVERSIGHT
Board independence, and lack of controlling shareholder concerns

DIVERSITY IN LEADERSHIP
Diversity in board and executive leadership

WAYS TO HARNESS ESG DATA TO DEVELOP AN INVESTMENT STRATEGY

IDENTIFY
Identify and screen the investable universe with higher ESG metrics or avoid the worst offenders (can be part of both fundamental and quantitative process)

EVALUATE
Use ESG as a "red flag" to identify risk & potentially avoid risk events

INTEGRATION
Incorporate ESG data into the valuation process, layering it into the risk and opportunity assessment.

BUILD MOMENTUM
Invest in companies focus on improvement of their ESG ratings & score, typically through shareholder engagement

Shareholder Engagement and Advocacy

Drive positive environmental and/or social change through active and continuous dialogue with corporates

A critical tool employed by managers across the Investing with Impact Framework is shareholder engagement. This tool complements investment approaches across the spectrum and provides a way for clients to drive positive change across environmental, social or governance-related areas of concern in their portfolio.

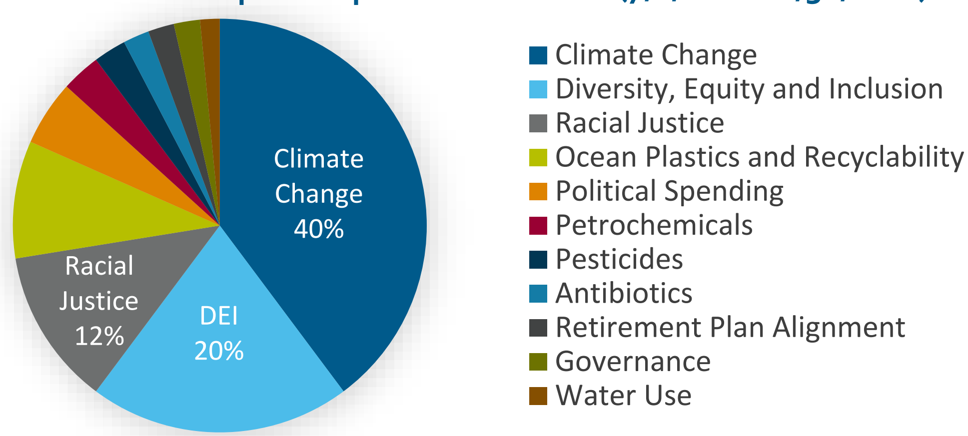
Shareholder Engagement Approaches Include:

- Dialogue with company executives
- Letter-writing and email campaigns
- Proxy voting
- Public policy initiatives
- Research and analysis
- Shareholder meetings
- Shareholder resolutions
- Stakeholder engagement

Shareholder Engagement Resources at Morgan Stanley

- Shareholder communications and proxy materials are delivered to all clients seamlessly via Morgan Stanley's eDelivery
- Third party managers on the Investing with Impact Platform employ shareholder engagement on behalf of our clients
- External organizations focused on shareholder engagement issues provide insight on corporate actions for investors

2022 Shareholder Report: Top 11 Issue Areas[1] (7/1/2021 - 6/30/2022)



1. 2022 Shareholder Impact Review: Changing Corporations for Good, As You Sow

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Investing with Impact Questions Incorporated into Due Diligence for All Managers

Over **300** Asset Managers covered by GIMA

70% of Traditional Firms have One or More Products with a Documented ESG Process

18% of Traditional Managers covered by GIMA are on the Investing with Impact Platform

Sample questions from Global Investment Manager Analysis (GIMA)'s initial request for information

- What approaches from the Three I's of Impact Framework (Intentionality, Influence and Inclusion) are employed by the manager?
- Describe your ESG / impact investment philosophy and investment process.
- How diverse is the manager's staff and leadership (e.g., gender, racial/ethnic diversity, etc.)?
- Which of the United Nations Sustainable Development Goals (SDGs), if any, is an intentional focus area?

GIMA has dedicated resources to analyze each manager's approach to sustainable investing. Managers that meet a higher bar across key dimensions are considered for the Investing with Impact Platform.

Data as of February 2023

A Higher Bar for the Investing With Impact Platform[1]

Morgan Stanley's Global Investment Manager Analysis team has proprietary process to analyze each manager's approach to Investing with Impact across 5 key dimensions

PERSONNEL & FIRM

- **Experience of sustainability professionals**
- Credentials & expertise of key professionals
- Ownership structure
- Compensation and/or incentives for key professionals
- Personnel turnover
- Depth of experience and history of success

INVESTMENT PROCESS & IMPLEMENTATION

- **Clear and intentional process for incorporating sustainability factors**
- **Shareholder engagement**
- Idea generation
- Portfolio construction methodology
- Risk management
- Sector and/or industry concentration or exposure
- Volatility guidelines and other constraints
- Style consistency

ANALYTICAL CAPABILITIES

- **Well-defined and repeatable method for evaluating data and materiality**
- **Outcomes measurement and impact reporting**
- Depth of analysis
- Industry expertise
- Databases, technology and analytical tools
- Number of companies covered

BUSINESS OPERATIONS

- **Legal documentation with specific sustainability language**
- Manager incentives and client fees
- Assets under management
- Growth or stability of personnel
- Legal or regulatory issues
- Other business and management results and strategies

PERFORMANCE

- **Reviewed with the same rigorous analysis of traditional products**
- Compared to peer group of traditional products and benchmarks
- ~20% of Investing with Impact offerings selected for GIMA Focus List

Continuing due diligence for all Approved List and Focus List products including annual reviews, regular meetings with managers, performance analysis and an annual survey.

1. Out of 300+ asset managers covered by GIMA, only 18% of traditional managers are on the Investing with Impact Platform

Investing With Impact Thematic Solution

We help you clarify the range of approaches and how to implement investment solutions based on theme

CLIMATE ACTION INVESTING

Aid in the transition to a low carbon economy by investing in climate solutions and environmental leaders, as well as considering portfolio exposure to climate change-related risks.

FAITH-BASED INVESTING

Align investment portfolio with principles in accordance with specific religious values

GENDER LENS INVESTING

Promote better gender diversity and equality through increased exposure to companies committed to employing and advancing women in high-level leadership roles

RACIAL EQUITY INVESTING

Advance racial equity and combat systemic racism through increased exposure to companies committed to supporting social and racial equity.

MISSION ALIGN 360° INVESTING

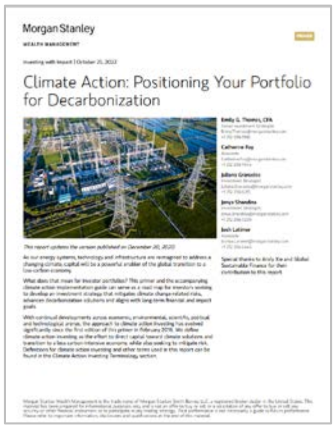
Evaluate, align and activate all pools of capital (human, philanthropic and financial) towards the theme of your choice to accomplish your organization's unique mission statement

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.

Climate Action Investing

Investors looking to mitigate climate-change related risks and identify opportunities that aid in the transition to a low carbon economy have a variety of approaches to develop disciplined climate action investing strategy.

Understanding The Risks & Opportunities


Morgan Stanley

Climate Action: Positioning Your Portfolio for Decarbonization

A changing climate and the transition to a low-carbon economy present **material climate-related investment risks and opportunities**.

We can help investors **develop a plan for climate-action investing** that seeks to mitigate climate change-related risks, advance decarbonization solutions and **align with their long-term financial goals**.

Developing A Climate Action Investment Strategy

DISCOVER CLIMATE GOALS

Define climate-focused objectives and develop a mission statement; Target themes that consider environmental opportunities and risks

BUILD CONSENSUS

Integrate climate-focused objectives with financial objectives through a documented investment plan or policy statement

IMPLEMENT

Leverage existing investment approaches to increase alignment with climate opportunities and reduce exposure to climate risks

REPORT

Assess portfolio alignment with climate-focused objectives and identify opportunities to further activate assets in order to create positive impact

INTENTIONALITY: Intentional investment process that seeks to generate market-rate returns alongside positive environmental and social impact in one of the following ways:

REDUCE CLIMATE RISKS → **IDENTIFY CLIMATE OPPORTUNITIES**

RESTRICTION SCREENING

Reduce or seek to eliminate exposure to companies tied to coal, oil, gas and other high GHG-emitting energy sources and activities

ESG INTEGRATION

Consider environmental, social and governance criteria relevant to climate action investing, alongside financial metrics in the investment process to balance risk and return

CLIMATE SOLUTIONS

Identify companies on revenue generated from products and services that seek to contribute to climate adaptation or mitigation solutions

INFLUENCE: Modify the behavior of portfolio companies to seek better environmental and social outcomes and drive industry capabilities

INCLUSION: Diverse perspectives can help guide the intentional investment process and engagement activities

Faith-Based Investing: Building Value from Values

Faith-based investors were among the first to harness capital markets to influence corporate behavior through restriction screening and shareholder engagement. While there is no "one size fits all" approach to faith-based investing, we help you integrate your faith-based impact goals into your Investment Policy Statement in the context of your risk/return objectives. All available faith-based investments at Morgan Stanley seek risk-adjusted market rate returns compared to traditional benchmarks.

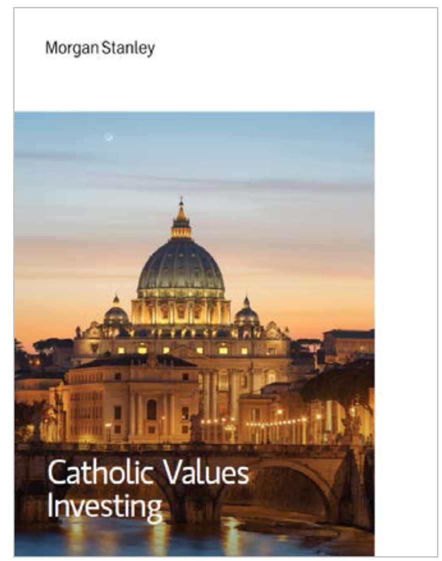
FAITH-BASED APPROACHES

Investors can support positive environmental and social change, avoid objectionable companies and target thematic solutions across several faiths including, but not limited to:

- Christianity
- Catholicism
- Judaism
- Islam

SPOTLIGHT ON CATHOLIC VALUES INVESTING

- The US Conference of Catholic Bishops provides a set of guidelines designed to help Catholic investors integrate the mission of the Church into the financial goals of their investment portfolio
- Guidelines ranges from negative / exclusionary screens (e.g. life ethics, weapons) to positive/inclusionary screens (e.g. alleviate poverty, mitigate climate change)



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Aligning Jewish Values with Investing and Philanthropy

In 2019, Morgan Stanley hosted the first-ever Jewish Values Consortiums, a series of events across the United States that brought together leaders in the Jewish, investment and philanthropic communities to discuss what it means to give and invest along the spectrum of Jewish Values. Insights from these Consortiums formed the foundation for the Jewish Values Giving and Investing Guide.

Informed by input and guidance from over 250 Jewish community leaders, the Jewish Values Giving and Investing Guide seeks to facilitate meaningful conversations about the religious wellspring of Jewish Values among families, boards, and the Financial Advisors, Institutional Consultants and Investment Managers who serve them.

Spotlight on Firm-wide Collaboration

Through collaborative initiatives such as Mission Align 360°, Investing with Impact and Philanthropy Management collaborated to advise clients seeking to better align and leverage their financial and philanthropic capital to generate positive impact across the entire capital spectrum and potentially have a greater impact on the world's problems.

MINIMIZE MISALIGNMENT → **INCREASE DIRECT IMPACT**

Jewish Values as a Restriction Screen	ESG Integration	Thematic Solutions	Program Related Investments	Recoverable Grants	Grants
Investments that seek to minimize or avoid exposure to certain companies, sectors, geographies or themes.	Investing in companies with sustainable corporate practices.	Investments in sectors of the market that address objectives that are consistent with Jewish Values faith-based goals.	Employ various financing methods with the primary objective of furthering a charitable mission.	Offers donors the potential to recover granted capital if the recipient charity meets a predetermined success scenario.	Jewish values-aligned philanthropists make donations to a broad spectrum of Jewish and secular organizations.

Shareholder Engagement: Engage with companies' management, voting proxies and filing shareholder resolutions based on broad environmental, social and governance practices and/or defined Jewish values

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Gender Lens Investing

A growing body of evidence points to better financial performance associated with higher levels of gender diversity, equity and inclusion defined as a balance in representation, empowerment and economic opportunity. (1) (2)

What Is Gender Lens Investing?

Gender Lens Investing is defined as the incorporation of gender criteria in the investment process to further diversity, equity, and inclusion and help improve investment decisions.

Gender Diversity Makes An Impact

Morgan Stanley's Global Quantitative Team evaluated four metrics to develop a holistic equal representation score that systematically ranks companies on their level of gender diversity: the percentage of women who are

- Board members
- Executives
- Managers
- Employees

Stocks with high gender diversity **outperformed** those with low gender diversity over the long term. (3)

INTENTIONALITY: Intentional investment process that seeks to generate market-rate returns alongside positive environmental and social impact, including , including improvements in gender DEI, in one of the following ways:

MINIMIZE GENDER DEI RISKS → **INCREASE GENDER DEI OPPORTUNITIES**

GENDER DEI AS A SCREEN

- Reduce exposure to companies with poor gender DEI records such as weak policies, poor supply chain safety records, and involvement in pornography
- Gender diversity primarily a risk; not proactively transformative

GENDER DEI LEADERS

- Seek companies with leading gender diversity records, including strong policies and programs, diverse boards and management and work / life balance programs
- Gender diversity is both a risk and opportunity to help identify long-term outperformance

GENDER THEMATIC SOLUTIONS

- Proactively direct capital towards women by supporting women entrepreneurs, women borrowers, and investing in companies that provide products that support women, like affordable childcare and maternal health products

INFLUENCE: Modify the behavior of portfolio companies to seek better environmental and social outcomes, including improvements in gender DEI, and drive industry capabilities

INCLUSION: Diverse perspectives can help guide the intentional investment process and engagement activities

1. Credit Suisse Research, "The CS Gender 3000 in 2021: Broadening the Diversity Discussion" (September 2021) 2. Sundiatu Dixon-Fyle, Kevin Dolan, Vivian Hunt, and Sara Prince, "Diversity Wins: How Inclusive Matters" (McKinsey & Company, May 19, 2020) 3. Morgan Stanley Research, "HERS Update: Gender Diversity Continues to Drive Alpha" (February 1, 2023)

Racial Equity Investing: Incorporating Improving Lives and Diversity, Equity and Inclusion Themes

Opportunities are emerging to advance racial equity and combat systemic racism through investment decisions. Investors play an important role by taking measurable action to promote racial justice through their investments.

What is Racial Equity Investing?


Morgan Stanley

Racial Equity Investing

Racial equity investing describes the effort to direct investment capital towards historically underrepresented groups, including Black, Hispanic, Asian-Indian, Asian-Pacific, and Native American populations.

Racial Equity investing aims to promote equity on issues ranging from economic opportunity to education, housing, quality employment, access to health care and more

Racial equity recognizes that the **intersectionality** of many areas of inequality as applied to an individual can include overlapping systems of marginalization.

INTENTIONALITY: Intentional investment process that factors in a holistic set of environmental, social and corporate governance (ESG) considerations including racial-equity criteria in one of the following ways:

MINIMIZE RISKS RELATED TO LACK OF RACIAL EQUITY → **ADVANCE RACIAL EQUITY**

RESTRICTION SCREENING

Investment strategies that minimize or avoid exposure to companies, sectors or geographies with lagging records of supporting racial equity and social justice

LEADERS

Investment strategies that incorporate a range of environmental, social, governance (ESG) criteria, including investing in companies that are leading in terms of racial equity factors relative to industry peers

SOLUTIONS

Investment strategies that intentionally focus on companies or funds seeking to advance racial equity as a way to alleviate social disparities, including, but not limited to: access to capital, affordable housing & community services, criminal justice reform, economic inclusion, education, healthcare, products & services for communities of color, and neighborhood revitalization

INFLUENCE: Modify the behavior of portfolio companies to seek better environmental and social outcomes, including improvement in racial equity, and drive industry capabilities

INCLUSION: Diverse perspectives can help guide the intentional investment process and engagement activities

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Mission Align 360°

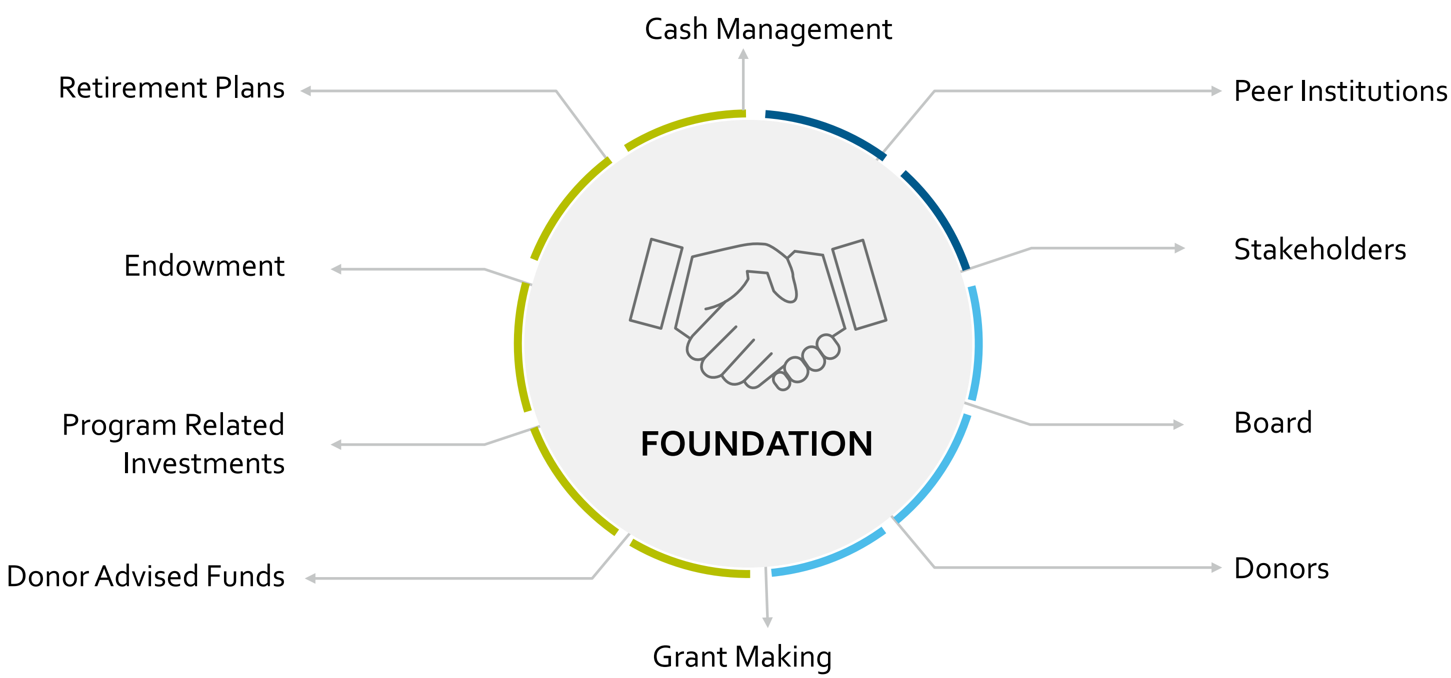
We help forward thinking organizations examine all 360° degrees of the organization – including human, financial and philanthropic capital for allocation towards their mission while seeking to generate positive environmental and social impact.

FINANCIAL CAPITAL
Investments that seek to achieve specific social and/or environmental goals while targeting market-rate financial returns

PHILANTHROPIC CAPITAL
A broad term which describes capital that has no, or low, expectation of financial return such as grant-making and program related investments.

HUMAN CAPITAL
The collective skills, talents, knowledge or other intangible assets of individuals that can be used to create economic value for the individuals, their organization or their community

ORGANIZATIONAL ASSETS AVAILABLE FOR IMPACT [1]



1. Morgan Stanley Investing with Impact, Mission Align 360°: Maximizing an Organization's Connection between Mission and Capital, May 2018

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Fiduciary Duty & Investing with Impact

Investment decisions must be made in relation to the overall resources of the institution and its mission.

Two key issues that Endowments and Foundations are subject to under the Uniform Prudent Management of Institutional Funds Act [1]

- ***THE DUTY OF LOYALTY*** requires a fiduciary to be loyal to the beneficiaries of the organization's charitable funds.
  - A loyal fiduciary must act in the best interest of the beneficiaries of the charitable funds and not in their own personal interest

- ***THE DUTY OF PRUDENCE*** connects more directly to investment decision making. Like any investment, the mission-aligned investor must balance cost, risk and return
  - UPMIFA upholds trustees to consider investment decisions in relation to the whole investment portfolio and the organization's charitable purposes [2]

Alignment to organizational mission

Fiduciaries must consider the mission of the organization and the extent to which a given investment is aligned to its mission

A holistic view of factors that may impact investment performance

ESG (Environmental, Social and Governance) analysis expands the set of considerations that are material to performance and risk management.[3]

Integration into investment policy statements (IPS)

The IPS can be amended to outline a process for including mission-aligned investments in accordance with an institution's mission and financial goals.

1. UPMIFA = Uniform Prudent Management of Institutional Funds Act, which provides guidance on investment decisions and endowment expenditures for nonprofit and charitable organizations
2. John Rogers, *Investing with Impact and Fiduciary Duty, 2015*
3. Morgan Stanley Institute for *Sustainable Investing, Sustainable Funds Outperform Peers in 2020 During Coronavirus*, 2021

Investing with Impact In Action

Our portfolio solutions are available and customizable to a wide array of client segments

PORTFOLIO NAME	DESCRIPTION	INVESTMENT MINIMUM
Custom Portfolios	Tailored to match client-specific financial and impact goals	$25,000,000
Investing with Impact Portfolios	Morgan Stanley Portfolio Solutions (MSPS) multi-asset class portfolios that utilize Investing with Impact third-party separately managed accounts, mutual funds and exchange-traded funds	$10,000 (Impact Portfolios) [1] $150,000 (Balanced Diversity Portfolio) $100,000 (Equity Diversity Portfolio)
MAPS Impact Solutions	Managed Advisory Portfolio Solutions (MAPS) separately managed accounts are fundamentally well-positioned and exhibit positive environmental, social and governance (ESG) corporate practices in addition to having revenue exposure to Morgan Stanley & Co.'s Global Sustainability Themes	$10,000 (US and Global equity)
Morgan Stanley Global Impact Funding Trust (MS GIFT)	Multiply the impact of charitable giving through Impact pools in Morgan Stanley's Donor Advised Fund	$25,000

Understanding Your Portfolio's Impact

Measurement and reporting are central to advancing the positive impact of your investments. You cannot manage what you are not measuring.

Problem

Investors have long sought the ability to understand the environmental and social impact of their investments; however, impact data and reporting is complex.

Current Landscape:

Impact reporting has evolved into a complex global network of organizations, data providers and rating systems that can be challenging to navigate.

15+ organizations such as the Global Impact Investing Network and the Sustainability Accounting Standards Board are building the infrastructure to drive the effective use of material sustainability information by investors

100+ data providers can now deliver environmental, social and governance (ESG) insights across multiple levels (company, manager and portfolio-level) to help determine ESG-driven risks and opportunities

Emerging ratings systems assess ESG performance, but are either over-simplified, non-customizable and struggle to capture intentional sustainable investing approaches

Solution

We have vetted and partnered with leading ESG data providers – MSCI ESG Research, ISS-ESG, Equileap and Fossil Free Indexes – to deliver a customized impact reporting tool exclusively for Morgan Stanley Financial Advisors and clients. **With us, you can understand and monitor your impact to make informed investment decisions based on your unique impact priorities.**

FFI

ISS ESG ethix·climate·oekom

MSCI

EQUILEAP MAKE A DIFFERENCE AND A RETURN

The description of Morgan Stanley Impact Quotient® and the reports that it generates are solely for informational purposes. You should not definitively rely upon it or use it to form the definitive basis for any decision, contract, commitment or action whatsoever, with respect to any proposed transaction or otherwise.

Introducing Morgan Stanley Impact Quotient®: A Client-Centric Approach to Impact Reporting

Available exclusively to Morgan Stanley clients, *Morgan Stanley Impact Quotient®* is a patented technology with a suite of capabilities designed to help you understand the environmental and social impact of your investments.[1]

1 DISCOVER
Determine your unique impact preferences and priorities through meaningful conversations with your Financial Advisor using the **Impact Profile Builder.**

2 ASSESS
Evaluate how your portfolio is aligned to your unique preferences by discussing your customized **Impact Reports** with your Financial Advisor.

3 ALIGN
Work with your Financial Advisor to **identify investment opportunities** to enhance alignment with your unique impact preferences.

The process is designed to capture impact priorities and assess alignment across multiple dimensions:

IMPACT PREFERENCES

IMPACT THEMES & OBJECTIVES	Social and / or environmental impacts sought to be aligned within an investment portfolio
ISSUES OF CONCERN	Sectors, issues or business activities found to be objectionable or to be avoided with an investment portfolio
SUSTAINABLE DEVELOPMENT GOALS	United nations supported framework aimed at ending poverty, protecting the planet and ensuring prosperity for all
TARGETED POPULATIONS FOR IMPACT	Geographies or groups intended to experience positive impacts associated with selected investments
FAITH-BASED APPROACHES	Faith can serve as a lens or set of considerations within an investment portfolio

PORTFOLIO PREFERENCES

PORTFOLIO INTEGRATION APPROACH	Portfolio integration, targeted curve out, portfolio tilt, or integration when new cash or investment changes
AVAILABLE INVESTMENT OPPORTUNITIES	Public markets (e.g., Public equities fixed income, and multi Asset) and/or alternative investment (e.g., Real Assets, Private Equity)[2]
APPROACHES TO INVESTING WITH IMPACT	Restriction screening, ESG integration, thematic exposure, impact investing and shareholder engagement

1. US Pat. No. 11,188,983 2. 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. The description of Morgan Stanley Impact Quotient® and the reports that it generates are solely for informational purposes. You should not definitively rely upon it or use it to form the definitive basis for any decision, contract, commitment or action whatsoever, with respect to any proposed transaction or otherwise.

Evaluate and Enhance the Alignment of Your Investments

Why Engage With *Morgan Stanley Impact Quotient®*?

#1 Ensures your Financial Advisor **understands your unique impact priorities**.

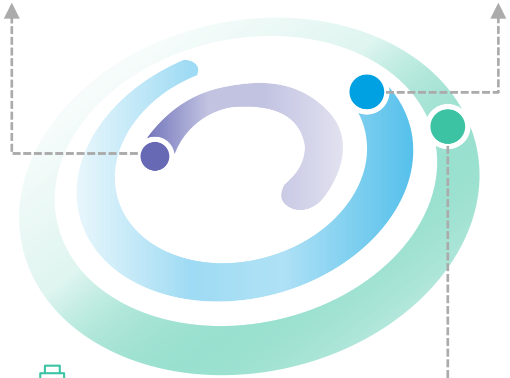
#2 Gain **transparency into the impact of your investments** with data-driven insights customized to your unique preferences.

#3 Take action with your Financial Advisor **to better align your investments** over time.

Who is *Morgan Stanley Impact Quotient®* Designed For?

Individuals seeking to generate positive impact with their capital

Families seeking to align portfolios to their legacies



Institutions and Boards seeking to understand portfolio alignment or organizational mission

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The Future is Bright for Investing with Impact

80%

of individual investors believe companies with leading sustainability practices may be better long-term investments [1]

2050

Year that the business opportunities for sustainability-focused companies are expected to be between **$3 trillion** and **$10 trillion** annually, or up to 4.5% of global GDP [2]

Companies are improving their competitive position by adjusting their business strategies to address long-term global themes / mega-trends, including: Climate Change, Health & Wellbeing, Inclusion, Resource Management, Safety & Security [3]

79%

of U.S active investors are interested in sustainable investing [1] and **83%** of asset owners already implement or plan to implement sustainable investing in all or part of their portfolios[4]

Morgan Stanley is well-positioned to help deliver impact via customized solutions based on clients' financial and impact goals

1. Morgan Stanley Institute for Sustainable Investing, "Sustainable Signals: Individual Investors and the COVID-19 Pandemic" 2021.
2. Vision 2050: The New Agenda for Business, World Business Council for Sustainable Development, 2010
3. Morgan Stanley & Co. Sustainability Research
4. Morgan Stanley Institute for Sustainable Investing and Morgan Stanley Investment Management, "Sustainable Signals: Opportunities for Asset Managers to Meet Asset Owner Demands" 2022.

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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.

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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 (the "Fee") which is payable monthly in advance (some account types may be billed differently). 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 may also pay a separate Sub-Manager fee, if applicable.

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. The advisory program you choose is described in the applicable Morgan Stanley Smith Barney LLC ADV Brochure, available at www.morganstanley.com/ADV.

Morgan Stanley or Executing Sub-Managers, as applicable, in some of Morgan Stanley's Separately Managed Account ("SMA") programs may effect transactions through broker-dealers other than Morgan Stanley or our affiliates. In such instances, you may be assessed additional costs by the other firm in addition to the Morgan Stanley and Sub-Manager fees. Those costs will be included in the net price of the security, not separately reported on trade confirmations or account statements. Certain Sub-Managers have historically directed most, if not all, of their trades to outside firms. Information provided by Sub-Managers concerning trade execution away from Morgan Stanley is summarized at: www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf. For more information on trading and costs, please refer to the ADV Brochure for your program(s), available at www.morganstanley.com/ADV, or contact your Financial Advisor / Private Wealth Advisor.

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. Separately, certain strategies managed or sub-advised by us or our affiliates, including but not limited to MSIM and Eaton Vance Management ("EVM") and its investment affiliates, may be included in your account. 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.

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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 Morgan Stanley Pathway Funds 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.

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

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

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

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."

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.

Money Market Funds: You could lose money in money market funds. Although money market funds classified as government funds (i.e., money market funds that invest 99.5% of total assets in cash and/or securities backed by the U.S government) and retail funds (i.e., money market funds open to natural person investors only) seek to preserve value at $1.00 per share, they cannot guarantee they will do so. The price of other money market funds will fluctuate and when you sell shares they may be worth more or less than originally paid. Money market funds may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits. A money market fund investment is not insured or guaranteed by the Federal Deposit Insurance Corporation or other government agency. The Fund's sponsor has no legal obligation to provide financial support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time.

Investors should carefully consider the investment objectives, risks, charges and expenses of a money market fund before investing. The prospectus contains this and other information about the money market fund. To obtain a prospectus, contact your Financial Advisor or visit the money market fund company's website. Please read the prospectus carefully before investing.

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 by exchanging a concentrated stock position for fund shares without triggering a taxable event. These funds are available only to qualified investors and may only be offered by Financial Advisors who are qualified to sell alternative investments. Before investing, investors should consider the following:
- Dividends are pooled
- Investors may forfeit their stock voting rights
- Investment may be illiquid for several years
- Investments may be leveraged or contain derivatives
- Significant early redemption fees may apply
- Changes to the U.S. tax code, which could be retroactive (potentially disallowing the favorable tax treatment of exchange funds)
- Investment risk and potential loss of principal

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**. Some funds also invest in foreign securities, which may involve currency risk. There is no assurance that the fund will achieve its investment objective. **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. **Environmental, Social and Governance ("ESG") investments** in a portfolio may experience performance that is lower or higher than a portfolio not employing such practices. Portfolios with ESG restrictions and strategies as well as ESG investments may not be able to take advantage of the same opportunities or market trends as portfolios where ESG criteria is not applied. There are inconsistent ESG definitions and criteria within the industry, as well as multiple ESG ratings providers that provide ESG ratings of the same subject companies and/or securities that vary among the providers. Certain issuers of investments may have differing and inconsistent views concerning ESG criteria where the ESG claims made in offering documents or other literature may overstate ESG impact. ESG designations are as of the date of this material, and no assurance is provided that the underlying assets have maintained or will maintain and such designation or any stated ESG compliance. As a result, it is difficult to compare ESG investment products or to evaluate an ESG investment product in comparison to one that does not focus on ESG. Investors should also independently consider whether the ESG investment product meets their own ESG objectives or criteria. There is no assurance that an ESG investing strategy or techniques employed will be successful. Past performance is not a guarantee or a dependable measure of future results. 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.

Structured Investments are complex and not appropriate for all investors. An investment in Structures Investments involve risks. These risks can include but are not limited to: (1) Fluctuations in the price, level or yield of underlying instruments, interest rates, currency values and credit quality, (2) Substantial or total loss of principal, (3) Limits on participation in appreciation of underlying instrument, (4) Limited liquidity, (5) Issuer credit risk and (6) Conflicts of Interest. There is no assurance that a strategy of using structured product for wealth preservation, yield enhancement, and/or interest rate risk hedging will meet its objectives.

Alternative investments may be either traditional alternative investment vehicles, such as hedge funds, fund of hedge funds, private equity, private real estate and managed futures or, non-traditional products such as mutual funds and exchange-traded funds that also seek alternative-like exposure but have significant differences from traditional alternative investments. 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; and Risks associated with the operations, personnel, and processes of the manager. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management.

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.

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.

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.

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 advisory clients. Morgan Stanley Wealth Management rebates such fees that are received and attributable to an Investment held by an advisory client and retains the fees paid in connection with 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.

<u>Virtual Currency Products (Cryptocurrencies)</u>

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

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

- Certain Digital Asset funds and products, allow investors to invest on a more frequent basis than investors may withdraw from the fund or product, and interests in such funds or products are generally not freely transferrable. This means that, particularly given the volatility of Digital Assets, an investor will have to bear any losses with respect to its investment for an extended period of time and will not be able to react to changes in the price of the Digital Asset once invested (for example, by seeking to withdraw) as quickly as when making the decision to invest. Such Digital Asset funds and products, are intended only for persons who are able to bear the economic risk of investment and who do not need liquidity with respect to their investments.

- Given the volatility in the price of Digital Assets, the net asset value of a fund or product that invests in such assets at the time an investor's subscription for interests in the fund or product is accepted may be significantly below or above the net asset value of the product or fund at the time the investor submitted subscription materials.

- Certain Digital Assets are not intended to function as currencies but are intended to have other use cases. These other Digital Assets may be subject to some or all of the risks and considerations set forth herein, as well as additional risks applicable to such Digital Assets. Buyers, sellers and users of such Digital Assets should thoroughly familiarize themselves with such risks and considerations before transacting in such Digital Assets.

- The value of Digital Assets may be negatively impacted by future legal and regulatory developments, including but not limited to increased regulation of such Digital Assets. Any such developments may make such Digital Assets less valuable, impose additional burdens and expenses on a fund or product investing in such assets or impact the ability of such a fund or product to continue to operate, which may materially decrease the value of an investment therein.

- Due to the new and evolving nature of digital currencies and the absence of comprehensive guidance, many significant aspects of the tax treatment of Digital Assets are uncertain. Prospective investors should consult their own tax advisors concerning the tax consequences to them of the purchase, ownership and disposition of Digital Assets, directly or indirectly through a fund or product, under U.S. federal income tax law, as well as the tax law of any relevant state, local or other jurisdiction.

- Over the past several years, certain Digital Asset exchanges have experienced failures or interruptions in service due to fraud, security breaches, operational problems or business failure. Such events in the future could impact any fund's or product's ability to transact in Digital Assets if the fund or product relies on an impacted exchange and may also materially decrease the price of Digital Assets, thereby impacting the value of your investment, regardless of whether the fund or product relies on such an impacted exchange.

- Although any Digital Asset product and its service providers have in place significant safeguards against loss, theft, destruction and inaccessibility, there is nonetheless a risk that some or all of a product's Digital Asset could be permanently lost, stolen, destroyed or inaccessible by virtue of, among other things, the loss or theft of the "private keys" necessary to access a product's Digital Asset.

- Investors in funds or products investing or transacting in Digital Assets may not benefit to the same extent (or at all) from "airdrops" with respect to, or "forks" in, a Digital Asset's blockchain, compared to investors who hold Digital Assets directly instead of through a fund or product. Additionally, a "fork" in the Digital Asset blockchain could materially decrease the price of such Digital Asset.

- Digital Assets are not legal tender, and are not backed by any government, corporation or other identified body, other than with respect to certain digital currencies that certain governments are or may be developing now or in the future. No law requires companies or individuals to accept digital currency as a form of payment (except, potentially, with respect to digital currencies developed by certain governments where such acceptance may be mandated). Instead, other than as described in the preceding sentences, Digital Asset products' use is limited to businesses and individuals that are willing to accept them. If no one were to accept digital currencies, virtual currency products would very likely become worthless.

- Platforms that buy and sell Digital Assets can be hacked, and some have failed. In addition, like the platforms themselves, digital wallets can be hacked, and are subject to theft and fraud. As a result, like other investors have, you can lose some or all of your holdings of Digital Assets.

- Unlike US banks and credit unions that provide certain guarantees of safety to depositors, there are no such safeguards provided to Digital Assets held in digital wallets by their providers or by regulators.

- Due to the anonymity Digital Assets offer, they have known use in illegal activity, including drug dealing, money laundering, human tracking, 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 of entirely the ability to use or trade Digital Asset products.

- Digital Assets may not have an established track record of credibility and trust. Further, any performance data relating to Digital Asset products may not be verifiable as pricing models are not uniform.

- Investors should be aware of the potentially increased risks of transacting in Digital Assets relating to the risks and considerations, including fraud, theft, and lack of legitimacy, and other aspects and qualities of Digital Assets, before transacting in such assets.

- The exchange rate of virtual currency products versus the USD historically has been very volatile and the exchange rate could drastically decline. For example, the exchange rate of certain Digital Assets versus the USD has in the past dropped more than 50% in a single day. Other Digital Assets may be affected by such volatility as well.

- Digital Asset exchanges have limited operating and performance histories and are not regulated with the same controls or customer protections available to more traditional exchanges transacting equity, debt, and other assets and securities. There is no assurance that a person/exchange who currently accepts a Digital Asset as payment will continue to do so in the future.

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

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

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

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

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

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.

Artificial intelligence (AI) is subject to limitations, and you should be aware that any output from an IA-supported tool or service made available by the Firm for your use is subject to such limitations, including but not limited to inaccuracy, incompleteness, or embedded bias. You should always verify the results of any AI-generated output.

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.

When Morgan Stanley Smith Barney LLC, its affiliates and Morgan Stanley Financial Advisors and Private Wealth Advisors (collectively, "Morgan Stanley") provide "investment advice" regarding a retirement or welfare benefit plan account, an individual retirement account or a Coverdell education savings account ("Retirement Account"), Morgan Stanley is a "fiduciary" as those terms are defined under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and/or the Internal Revenue Code of 1986 (the "Code"), as applicable. When Morgan Stanley provides investment education, takes orders on an unsolicited basis or otherwise does not provide "investment advice", Morgan Stanley will not be considered a "fiduciary" under ERISA and/or the Code. For more information regarding Morgan Stanley's role with respect to a Retirement Account, please visit www.morganstanley.com/disclosures/dol. Tax laws are complex and subject to change. Morgan Stanley does not provide tax or legal advice. Individuals are encouraged to consult their tax and legal advisors (a) before establishing a Retirement Account, and (b) regarding any potential tax, ERISA and related consequences of any investments or other transactions made with respect to a Retirement Account. Individuals should consult

their tax advisor for matters involving taxation and tax planning and their attorney for matters involving trust and estate planning, charitable giving, philanthropic planning and other legal matters.

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.

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 be considered investment advice or a recommendation for either ERISA or Internal Revenue Code purposes and that (unless otherwise provided in a written agreement and/or as described at www.morganstanley.com/disclosures/dol) you remain solely responsible for your assets and all investment decisions with respect to your assets. Nevertheless, if Morgan Stanley or your Financial Advisor provides "investment advice," as that term is defined under Section 3(21) of ERISA, to you with respect to certain retirement, welfare benefit, or education savings account assets for a fee or other compensation, Morgan Stanley and/or your Financial Advisor will be providing such advice in its capacity as a fiduciary under ERISA and/or the Code. Morgan Stanley will only prepare a financial plan at your specific request using Morgan Stanley approved financial planning software.

The Morgan Stanley Goals-Planning System (GPS) includes a brokerage investment analysis tool. While securities held in a client's investment advisory accounts may be included in the analysis, the reports generated from the GPS Platform are not financial plans nor constitute a financial planning service. A financial plan generally seeks to address a wide spectrum of a client's long-term financial needs, and can include recommendations about insurance, savings, tax and estate planning, and investments, taking into consideration the client's goals and situation, including anticipated retirement or other employee benefits. Morgan Stanley Smith Barney LLC ("Morgan Stanley") will only prepare a financial plan at a client's specific request using Morgan Stanley approved financial planning software. Investing in financial instruments carries with it the possibility of losses and that a focus on above-market returns exposes the portfolio to above-average risk. Performance aspirations are not guaranteed and are subject to market conditions. High volatility investments may be subject to sudden and large falls in value, and there could be a large loss on realization which could be equal to the amount invested. **IMPORTANT**: The projections or other information provided by the Morgan Stanley Goals Planning System 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. Morgan Stanley does not represent or guarantee that the projected returns or income will or can be attained.

A LifeView Financial Goal Analysis ("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 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.

Important information about your relationship with your Financial Advisor and Morgan Stanley Smith Barney LLC when using LifeView Goal Analysis or LifeView Advisor. When your Financial Advisor prepares and delivers a Financial Goal Analysis (i.e., when using LifeView Goal Analysis), they will be acting in a brokerage capacity. When your Financial Advisor prepares a Financial Plan (i.e., when using LifeView Advisor), they will be acting in an investment advisory capacity with respect to the delivery of your Financial Plan. This Investment Advisory relationship will begin with the delivery of the Financial Plan and ends thirty days later, during which time your Financial Advisor can review the Financial Plan with you. To understand the differences between brokerage and advisory relationships, you should consult your Financial Advisor, or review our "Understanding Your Brokerage and Investment Advisory Relationships," brochure available at https://www.morganstanley.com/wealth-relationshipwithms/pdfs/understandingyourrelationship.pdf

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 Financial Advisor or 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 Financial Advisor or Private Wealth Advisor, may vary by product and over time.

Investment and services offered through Morgan Stanley Smith Barney LLC, Member SIPC.

Annuities and insurance products are offered in conjunction with Morgan Stanley Smith Barney LLC's licensed insurance agency affiliates. Not all products and services discussed herein are available through Morgan Stanley Smith Barney LLC's licensed insurance agency affiliates.

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 that sponsors a donor advised fund program. 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.

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.

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. Morgan Stanley does not provide tax and/or legal advice to investors in the 529 Plan. Investors should consult their personal tax advisor for tax-related matters and their attorney for legal matters. For more information please see the Morgan Stanley National Advisory 529 Plan Description and the applicable Morgan Stanley ADV brochure at www.morganstanley.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.

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.

The Morgan Stanley National Advisory 529 Plan Description contains more information on investment options, risk factors, fees and expenses, and potential tax consequences, which should be carefully considered before investing. Investors can obtain a 529 Plan Description from their Financial Advisor and should read it carefully before investing.

Investments in the 529 Plan are not FDIC-insured, nor are they deposits or guaranteed by a bank or any other entity, so an individual may lose money through such investments.

Investors should consider many factors before deciding which 529 plan is appropriate. Some of these factors include: the plan's investment options and the historical investment performance of these options, the plan's flexibility and features, the reputation and expertise of the plan's investment manager, plan contribution limits and the federal and state tax benefits associated with an investment in the plan. Some states, for example, offer favorable tax treatment and other benefits to their residents only if they invest in the state's own qualified tuition program. Investors should determine their home state's tax treatment of 529 plans when considering whether to choose an in-state or out-of-state plan. Investors should consult with their tax or legal advisor before investing in any 529 plan or contact their state tax division for more information.

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.

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

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

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

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.

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

Important Risk Information for Securities Based Lending: Clients must be aware that: (1) Sufficient collateral must be maintained to support the loan and to take future advances; (2) Clients may have to deposit additional cash or eligible securities on short notice; (3) Some or all of the pledged securities may be sold without prior notice in order to maintain account equity at required collateral maintenance levels. Clients will not be entitled to choose the securities that will be sold. These actions may interrupt 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") reserve 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 the 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.

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

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

Clients may be responsible for the fees of a third party law firm engaged to review complex transactions (e.g., review of trust agreements). Clients may also be charged a fee for the issuance of a letter of credit, for prepayment of principal on fixed rate advances, and upon a client's request for certain cash management services (e.g., duplicate statement or check re-order).

Borrower shall pay Morgan Stanley Private Bank, National Association or Morgan Stanley Bank, N.A. ("Bank"), as applicable, a prepayment fee if any portion of the principal on a Fixed Rate Advance is prepaid prior to the applicable Scheduled Payment Date(s), regardless of the reason that the Fixed Rate Advance is prepaid, and including, without limitation, as a result of a demand by the Bank or liquidation of collateral by the Bank. The Bank, in its sole discretion, can make a Variable Rate Advance and apply the proceeds to such prepayment fee. Interest will accrue on the unpaid portion of the debited amount at a variable interest rate until the amount is paid in full .

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

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

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

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

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

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

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

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

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

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

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 for further details 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 10,000 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, free credit balances held in an account(s) at Morgan Stanley Smith Barney LLC are automatically deposited into an interest-bearing deposit account(s), at FDIC-insured banks. For more information, view the Bank Deposit Program Disclosure Statement.

Under the Savings and Preferred Savings programs ("Savings"), Morgan Stanley Smith Barney LLC makes available interest-bearing FDIC insured deposit accounts(s) at either Morgan Stanley Private

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

Reserved clients and CashPlus accounts are eligible for unlimited global ATM fee rebates. All other clients are eligible for up to $200 in annual global ATM fee rebates.

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.

The Greenlight App and Debit Card is provided by Greenlight Financial Technologies, not Morgan Stanley or any of its affiliates. Morgan Stanley has entered into a referral partnership with Greenlight Technology Inc., the program manager for the Greenlight card and related mobile application. Greenlight charges a usage fee of $4.99 per month. Morgan Stanley will reimburse this $4.99 monthly fee to Greenlight on your behalf for one Greenlight account (up to five minors under 18 years old) as long as the following conditions are met:

- Enroll in Greenlight using the enrollment link on Morgan Stanley Online or Mobile;

- Enroll in the Greenlight standard plan (currently $4.99/month (subject to change). Greenlight +Invest and Greenlight Max or any other current and future products are excluded from this offer; and

- Link a CashPlus Account for the Greenlight debit card funding.

Limited to one free Greenlight enrollment per CashPlus ALG. This fee waiver only applies while you fund the Greenlight Debit Card from your CashPlus Account. Other Morgan Stanley accounts are not eligible for this offer and the Greenlight usage fee will no longer be waived if you close the associated CashPlus account or change the funding source on the Greenlight Debit Card to any other account type, including another Morgan Stanley non-CashPlus account type.

Please review the Greenlight terms and conditions and other applicable fees for the service at Greenlightcard.com before enrolling (such terms are subject to change at any time) Only the monthly usage fee is waived. You are responsible for all other fees associates with the use of the Greenlight service.

 The Greenlight card is issued by Community Federal Savings Bank, member FDIC, pursuant to license by Mastercard International. Message and data rates may apply.

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

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

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

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

The Morgan Stanley Mobile App is currently available for iPhone® and iPad® from the App Store® and AndroidTM on Google PlayTM. Standard messaging and data rates from your provider may apply. Subject to device connectivity.

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.

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

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

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