Graystone Consulting
from Morgan Stanley

NACUBO Study Comparison

CSU Foundation
May 2023

Delivered On: 5/12/2023

Graystone Consulting
from Morgan Stanley

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June 2022 Average Annualized Returns – By Size of Institution

	Over $1 Billion	$501M - $1 Billion	$251M - $500M	$101M - $250M	$51M - $100M	$25M - $50M	Under $25 M	CSU Foundation
1-year net annualized return	-4.5%	-5.7%	-7.8%	-9.0%	-9.7%	-10.7%	-11.5%	-11.3%
3-year net annualized return	10.5%	8.5%	7.7%	6.8%	5.8%	5.4%	4.4%	7.0%
5-year net annualized return	9.4%	7.8%	7.2%	7.0%	5.9%	6.2%	5.5%	6.5%

- The largest endowments were best performing once again for FY ending 2022
  - Private Energy and infrastructure drove much of that success, as well as overall allocations to private equity, private real estate and hedge funds.
- Target returns have jumped from about 7.5% to 8.25% driven by higher inflation expectations and higher fees and expenses
  - Higher fees associated with strong performance from private markets leading to more incentive fees paid

*Please refer to attached NACUBO study for applicable context

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Asset Allocation

	Over $1 Billion	$501M - $1 Billion	$251M - $500M	$101M - $250M	$51M - $100M	$25M - $50M	Under $25 M	CSU Foundation
US Equities	13%	21%	21%	28%	35%	39%	43%	17%
Non-US Equities	11%	14%	12%	13%	12%	14%	14%	16%
Global Equities	7%	6%	9%	10%	8%	5%	2%	15%
Fixed Income	6%	9%	11%	16%	19%	22%	27%	20%
Alternative Strategies	59%	46%	43%	31%	22%	17%	12%	32%
Marketable Alternative Strategies (HFs)	16%	12%	13%	10%	7%	6%	3%	10%
Private Equity	15%	15%	11%	9%	5%	3%	1%	13%
Venture Capital	13%	7%	6%	3%	1%	1%	0%	1%
Private Real Estate	5%	3%	3%	3%	2%	2%	2%	7%
Energy and Infrastructure	4%	2%	1%	1%	1%	0%	0%	1%
Marketable Real Assets	2%	2%	3%	3%	3%	2%	3%	0%
Private Debt	2%	2%	1%	1%	1%	1%	2%	0%
Other Alternatives	2%	2%	5%	2%	1%	1%	2%	0%
Short Term Securities / Cash	4%	4%	4%	3%	4%	3%	2%	0%

*Non-US Equities includes: Developed non-U.S. equities active/passive and Emerging Markets active/passive
Fixed Income excludes: Private Debt and Cash and equivalents <1 year, which are included in Alternative Strategies and Short Term Securities/Cash respectively

- Largest Endowments report roughly 30% allocated to Private Equity and Venture Capital
- Within public equities, still a large home country bias amongst smallest endowments, while no bias amongst the largest
- Hedge funds:
  - It appears larger endowments are using HF's as a bond proxy as aggregate HF and FI allocations are roughly the same across all size cohorts, despite much larger HF allocations amongst larger endowments.
- Private Real Assets
  - Largest cohort have an average allocation to Private RA's of approximately 10%
  - Brings total illiquidity of these largest endowments to over 40% of invested

*Please refer to attached NACUBO study for applicable context

Spending Policy

CSU Foundation Spending Policy:

"4% of three-year moving average of market valuations."

- Average annual spend rate for Fiscal Year 2022 was 4.6%
- 86% of institutions do not plan to adjust spending rates in the next 2-3 years
  - 8.8% expect to cut spending in the next 2-3 years
- Median of 5.3% of operating budget funded by endowment
- The vast majority of institutions still use a moving average 3-5 year smooth for calculating the draw

*Please refer to attached NACUBO study for applicable context

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New Gifts to the Endowment

Gifts are up across almost all size cohorts:

New gifts to the endowment ($ figures in 000s)

	Over $1 Billion	$501M - $1 Billion	$251M - $500M	$101M - $250M	$51M - $100M	$25M - $50M	Under $25 M
Total 2022 gifts	$10,329,335	$1,688,519	$1,037,224	$953,017	$287,263	$177,795	$30,217
Total 2021 gifts	$8,106,692	$1,414,810	$994,298	$851,320	$366,776	$133,301	$15,960
Average 2022 gifts	$89,820	$22,514	$11,034	$6,032	$2,685	$2,540	$1,162
Average 2021 gifts	$70,493	$18,864	$10,578	$5,388	$3,428	$1,932	$638
Median 2022 gifts	$60,001	$15,181	$7,459	$3,774	$2,063	$1,469	$627
Median 2021 gifts	$44,901	$12,341	$6,792	$3,476	$2,158	$1,065	$398

*Please refer to attached NACUBO study for applicable context

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Administrative Expenses

Annual fee to the endowment to cover the administrative costs

	Over $1 Billion	$501M - $1 Billion	$251M - $500M	$101M - $250M	$51M - $100M	$25M - $50M	Under $25 M
Minimum Annual Fee	0.55	0.25	1.00	0.50	0.00	0.35	0.80
Median Annual Fee	1.00	1.28	1.43	1.25	1.00	1.25	1.00
Maximum Annual Fee	1.50	2.00	2.00	2.97	2.50	2.50	2.25

- Median annual fee to the endowment to cover administrative costs is fairly consistent across peer groups

*Please refer to attached NACUBO study for applicable context

Socially Responsible / ESG Investment Criteria

	Total Institutions	Over $1 Billion	$501M - $1 Billion	$251M - $500M	$101M - $250M	$51M - $100M	$25M - $50M	Under $25 M
Joined ESG Network	**23%**	32%	24%	19%	20%	19%	17%	0%
Appointed CSO	**8%**	7%	8%	9%	11%	5%	0%	0%
Proxy Voting Committee	**9%**	18%	3%	4%	7%	10%	8%	0%
ESG in Investment Policy	**86%**	80%	92%	91%	82%	86%	92%	100%
Offered ESG	**17%**	16%	11%	13%	24%	19%	25%	0%

- Big increases in the number of institutions incorporating responsible investing into some aspect of the portfolio
- 86% include a commitment to ESG principles within IPS
- Approximately 24% are planning to add language regarding DE&I
  - About 10% currently have language

*Please refer to attached NACUBO study for applicable context

OCIO

Use of OCIO to run the investment management of institution endowment

	Over $1 Billion	$501M - $1 Billion	$251M - $500M	$101M - $250M	$51M - $100M	$25M - $50M	Under $25 M
Percent of institutions using an OCIO	13.91%	31.58%	50.00%	65.36%	54.37%	55.07%	46.43%
Percent of institutions not using an OCIO	86.09%	68.42%	50.00%	34.64%	45.63%	44.93%	53.57%

- Institutions are continuing to move toward OCIO approach – now 46% vs. 43% in previous year
- Smaller institutions are more likely to use an OCIO, however, the $100-$250M peer group was the largest group at over 60% using an OCIO

*Please refer to attached NACUBO study for applicable context

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CSU Peer Group - Return Comparison

Endowment	2021/2022 Investment Return Rate
Peer Group 1	
Bakersfield	-11.60%
Channel Islands	-11.59%
Dominguez Hills	-13.08%
East Bay	-11.30%
Humboldt	-8.50%
Maritime Academy	-10.80%
San Bernardino	-13.70%
San Marcos	-10.80%
Stanislaus	-12.21%
Peer Group 2	
Chico	-8.80%
Los Angeles	-13.53%
Monterey Bay	-9.40%
Pomona	-11.80%
Sacramento	-11.64%
Sonoma	-10.50%
Peer Group 3	
Fresno	-11.19%
Fullerton	-8.51%
Long Beach	-12.60%
Northridge	-8.82%
San Diego	-6.30%
San Francisco	-12.00%
San Jose	-11.60%
San Luis Obispo	-13.50%
Chancellor's Office	-11.29%

*Data from 2021-22 CSU Systemwide Donor Impact Report

Notes: Investment returns are reported as net of investment fees.
Notes: Peer group and university-wide investment returns are presented as equal-weighted averages.
Bakersfield's return has been updated from the Donor Impact Report based on updated valuations for alternative investments for June 30, 2021. The return is produced by PARis Performance Reporting Platform.

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Disclosures

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This is not a financial plan:

This material is not a financial plan. A financial plan generally seeks to address a wide spectrum of your long-term financial needs, and can include recommendations about insurance, savings, tax and estate planning, and investments, taking into consideration your goals and situation, including anticipated retirement or other employee benefits. Morgan Stanley will only prepare a financial plan at your specific request using Morgan Stanley approved financial planning software where you will enter into a written agreement with a Financial Advisor. If you would like to have a financial plan prepared for you, please consult with a Morgan Stanley Financial Advisor.

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Differences between a brokerage and an investment advisory relationship:

You should understand the differences between a brokerage and advisory relationship. When providing you brokerage services, our legal obligations to you are governed by the Securities Act of 1933, the Securities Exchange Act of 1934, the rules of self-regulatory organizations such as the Financial Industry Regulatory Authority (FINRA), and state securities laws, where applicable. When providing you advisory services, our legal obligations to you are governed by the Investment Advisers Act, Federal statues and regulations relating to retirement accounts, and applicable state securities laws. These latter advisory obligations govern our conduct and disclosure requirements, creating a legal standard which is referred to as a “fiduciary” duty to you. We also may have a fiduciary duty to you, with respect to brokerage retirement accounts. Please reach out to your Financial Advisor if you have questions about your rights and our obligations to you, including the extent of our obligations to disclose conflicts of interest and to act in your best interest. For additional answers to questions about the differences between our advisory and brokerage services, please consult with your Financial Advisor or review our Understanding Your Brokerage and Investment Advisory Relationships brochure available at www.morganstanley.com/ourcommitment.

Investment Advisory Programs:

Morgan Stanley offers investment program services through a variety of investment programs, which are opened pursuant to written client agreements. Each program offers investment managers, funds and features that are not available in other programs; conversely, some investment managers, funds or investment strategies may be available in more than one program. Morgan Stanley's investment advisory programs may require a minimum asset level and, depending on a client's specific investment objectives and financial position, may not be suitable for the client. Please see the applicable program disclosure document for more information, available at www.morganstanley.com/ADV or from your Financial Advisor.

The investment management services of Morgan Stanley Smith Barney LLC and investment vehicles managed by Morgan Stanley Smith Barney LLC or its affiliates are not guaranteed and could result in the loss of value to your account. You should note that 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.

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

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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 a ongoing business relationship with certain investment managers or mutual fund companies whereby they, Morgan Stanley Wealth Management or its affiliates receive compensation from, or otherwise related to, those investment managers or mutual funds. For example, a Financial Advisor may suggest that GIMA evaluates an investment manager or fund in which a portion of his or her clients' assets are already invested. While such a recommendation is permissible, GIMA is responsible for the opinions expressed by GIMA. See the conflicts of interest section in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management for a discussion of other types of conflicts that may be relevant to GIMA's evaluation of managers and funds. In addition, Morgan Stanley Wealth Management, Morgan Stanley & Co LLC., 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, Morgan Stanley & Co LLC 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.

Global Investment Manager Analysis (GIMA) defines Adverse Active Alpha (AAA) as follows:

Adverse refers to the demonstrated ability to outperform in a variety of market environments and when conditions were difficult for active manager relative performance. “Difficult” periods were times when active management did not perform well relative to the index, as opposed to down market periods. At various times, active management has experienced difficult relative performance periods in up, down, and flat markets. We developed a set of factors to help discern which periods were more difficult for active managers that we utilize to identify managers that were able to overcome these headwinds and outperformed in the face of adversity.

Active refers to managers with high active share – i.e., managers whose portfolios looked different from the index – and had moderate to low tracking error. In this way, the ranking seeks to find managers that were active, but not taking outsized factor bets, such as large sector or industry bets and that had some degree of style consistency. The combination of high active share and low tracking error is fairly uncommon among active managers, but we believe these traits may point toward managers with strong stock picking skills.

Alpha refers to the demonstrated ability to add value relative to an index and/or peers. Back tests indicate that highly ranked managers as a group outperformed the index and style peer group over subsequent periods and relative to active share alone. By combining the “adverse” component with the “active” component, we believe we increase the odds of finding some of the most proficient stock pickers.

Important Considerations Regarding the Adverse Active Alpha ranking process:

Global Investment Manager Analysis, formerly Consulting Group Investment Advisor Research (CG IAR), provides comprehensive manager analysis for Morgan Stanley's investment advisory platforms on a wide range of investment products, including separately managed accounts, mutual funds and exchange-traded funds in the equity, fixed income and alternative investment categories.

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In our view, the Adverse Active Alpha manager ranking model is an important part of evaluating managers for consideration. However, we do recognize that AAA cannot, in and of itself, tell us which managers' strategies to invest in or when to buy or sell the strategies. While highly ranked managers historically performed well as a group in our analysis, past performance is not a guarantee of future results for any manager or strategy. Index returns assume reinvestment of dividends and, unlike fund or strategy returns, do not reflect any fees or expenses. Indices are unmanaged and not available for direct investment.

It is also important to keep in mind that just because a manager has high active share, a portfolio that looks different than the index (benchmark) doesn't necessarily mean the portfolio had or will have better performance than the index. Being different than the index does not consider factors such as: the timeliness of data provided by the manager, the appropriateness of the benchmark used for comparison to the portfolio, the relevancy of the period(s) being analyzed between the portfolio and the benchmark, knowing the difference between the securities and their concentration in a manager's portfolio vs. the benchmark and the potential that the data provided by the manager looked significantly different in periods before and after the performance snapshot(s) used for analysis. While the preceding considerations are not part of the AAA ranking model, GIMA's strives to evaluate other material and forward looking factors as part of the overall manager evaluation process. Factors such as 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. 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.

Morgan Stanley Wealth Management Global Investment Committee:

Morgan Stanley Wealth Management Global Investment Committee provides guidance on asset allocation recommendations through the creation and maintenance of the model portfolios called the GIC Asset Allocation Models. The GIC Asset Allocation Models have both strategic allocations (seeking to maximize returns in the long run) and tactical allocations (seeking to maximize returns over a shorter period). The asset allocation recommendations in the GIC Asset Allocation Models can then be implemented by us in either a brokerage account or an investment advisory account, tailored to your specific financial needs and situation, your risk tolerance and subject to any reasonable investment restrictions imposed by you.

The GIC was formed in August 2009 and is currently made up of senior professionals from Morgan Stanley and its affiliates, Morgan Stanley & Co. LLC and Morgan Stanley Investment Management Inc. 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.

General Risks of Investing:

You should note that 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.

Disclosures

Asset allocation, diversification and rebalancing do not assure a profit or protect against loss. There may be a potential tax implication with a rebalancing strategy. Please consult your tax advisor before implementing such a strategy.

Non diversification is attributed to a portfolio that holds a concentrated or limited number of securities; a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than a less concentrated portfolio. 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.

Value and growth investing also carry risks. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Key Asset Class Risk Considerations:

Alternative Investments

The asset allocation recommendations provided to you in this report may include allocations to alternative asset classes. It is important to note that Alternatives may be either traditional alternative investment vehicles or non-traditional alternative strategy products. Traditional alternative investment vehicles may include hedge funds, fund of hedge funds (both registered and unregistered), private equity, and private real estate or managed futures funds. Non-traditional alternative strategy products may include open-end mutual funds and ETFs. These non-traditional products also seek alternative-like exposure but have significant differences from traditional alternative investments.

The risks of traditional alternative investments may include: high liquidity, speculative and not suitable for all investors, loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices, 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 open-end mutual funds, and risks associated with the operations, personnel and processes of the manager. Non-traditional alternative strategy products may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss.

Commodities

The commodities markets may fluctuate widely based on a variety of factors including changes in supply and demand relationships; governmental programs and policies; national and international political and economic events; war and terrorist events; changes in interest and exchange rates; trading activities in commodities and related contracts; pestilence; weather; technological change; and, the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Disclosures

Fixed Income

Investing in fixed income securities involves interest rate risk, credit risk, and inflation risk. Interest rate risk is the possibility that bond prices will decrease because of an interest rate increase. When interest rates rise, bond prices, and the values of fixed income securities generally fall. Credit risk is the risk that a company will not be able to pay its debts, including the interest on its bonds. Inflation risk is the possibility that the interest paid on an investment in bonds will be lower than the inflation rate, decreasing purchasing power.

Ultra-Short Fixed Income

Ultra-short bond funds are mutual funds and exchange-traded funds that generally invest in fixed income securities with very short maturities, typically less than one year. They are not money market funds. While money market funds attempt to maintain a stable net asset value, an ultra-short bond fund's net asset value will fluctuate, which may result in the loss of the principal amount invested. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Non-US Fixed Income

Foreign fixed income securities may involve greater risks than those issued by U.S. companies or the U.S. government. Economic, political and other events unique to a country or region will affect those markets and their issues, but may not affect the U.S. market or similar U.S. issuers.

Inflation-Linked Securities

These securities adjust periodically against a benchmark rate, such as the Consumer Price Index (CPI). They pay a coupon equal to the benchmark rate, plus a fixed 'spread' and reset on a periodic basis. The initial interest rate on an inflation linked or floating security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in CPI, or the linked reference interest rate. However, there can be no assurance that these increases will occur.

High Yield Fixed Income

High yield fixed income securities, also known as “junk bonds”, are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Municipal Fixed Income

Income generated from an investment in a municipal bond 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.

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Equity

Investing in stock securities involves volatility risk, market risk, business risk, and industry risk. The prices of stocks fluctuate. Companies paying dividends can reduce or cut payouts at any time. Volatility risk is the chance that the value of a stock will fall. Market risk is the chance that the prices of all stocks will fall due to conditions in the economic environment. Business risk is the chance that a specific company's stock will fall because of issues affecting it such as the way the company is managed. Industry risk is the chance that a set of factors particular to an industry group will adversely affect stock prices within the industry.

Small/Mid Cap Equity

Stocks of small and medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more established companies.

International/Emerging Markets Equities

Foreign investing involves certain risks not typically associated with investments in domestic corporations and obligations issued by the U.S. government, such as currency fluctuations and controls, restrictions on foreign investments, less governmental supervision and regulation, less liquidity and the potential for market volatility and political instability. In addition, the securities markets of many of the emerging markets are substantially smaller, less developed, less liquid and more volatile than the securities of the U.S. and other more developed countries.

Structured Investments

An investment in structured investments involves risks. These risks can include but are not limited to: fluctuations in the price, level or yield of underlying asset(s), interest rates, currency values and credit quality, substantial loss of principal, limits on participation in appreciation of underlying asset(s), limited liquidity, credit risk, and/or conflicts of interest. Many structured investments do not pay interest or guarantee a return above principal at maturity. Investors should read the security's offering documentation prior to making an investment decision.

Portfolio Analysis

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.

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- 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.

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Disclosures

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