Morgan Stanley

WEALTH MANAGEMENT

PRIMER

Global Investment Manager Analysis | May 31, 2022

# Tax-Managed Strategies Introduction: It's Not What You Earn, It's What You Keep

**Stephanie C Mergenthaler**
Investment Analyst
Stephanie.Mergenthaler@ms.com
+1 212 296-1514

*This report updates the original report published on May 5, 2020.*

- Investors should consider maximizing “tax alpha,” or the difference between pretax and after-tax excess returns relative to an applicable benchmark. One way to do this is through separately managed accounts (SMAs) that can employ such strategies as index replication, tax-loss harvesting, timing of potential gains and customization.
- Uncertainty around potential tax code changes for high-net-worth individuals, coupled with lower expected equity returns, create an optimal backdrop to revisit the benefits of tax-managed investment strategies.
- Market volatility is a meaningful element in generating tax alpha. In periods of increased volatility, as evidenced in 2022, losses can be harvested and applied against future potential gains.
- Given the complexity of tax regulation and the expansion of the product universe, striving for tax alpha requires an awareness of applicable investment methods as well as skilled managers. This report introduces the strategy and details the tax-managed SMAs covered by Morgan Stanley Global Investment Manager Analysis (GIMA) and available on both the UMA and CES platforms.

# Introduction

For taxable accounts, the potential tax implications of an investment should play a crucial part in the decision process, in addition to risk evaluation and return objectives.

In the current market environment, this is even more essential. Stocks, as measured by the S&P 500 Index, compounded annually at 14.73% between March 2009 and March 2022. The Global Investment Committee (GIC) estimates that US equities may return an average of 5.2% a year over the next seven years (see *Inputs for GIC Asset Allocation: Annual Update of GIC Capital Markets Assumptions,* March 31, 2022). Furthermore, the heightened volatility experienced in 2022 should likely persist going forward, on market expectations of rates, inflation and Fed policy. This further highlights the potential benefits from opportunistic tax-loss harvesting.

This comes in conjunction with potential tax code changes being considered by the Biden administration that may impact higher-income investors. This backdrop increases the appeal of separately managed accounts (SMAs) that offer investors tax management through tax-loss harvesting and customized tax management. These SMAs seek to generate after-tax excess returns, also known as "tax alpha," and potentially minimize the "tax drag" that is associated with taxes on capital gains.

What are the basics of these tax-managed strategies? What do investors need to know to successfully navigate them? Below, we explore these questions and provide an introduction to these products.

### Exhibit 1: Tax Drag and Tax Alpha

**TAX ALPHA:**

**The difference between an investment's pretax return and the after-tax return.**

**TAX DRAG:**

**The reduction in an investor's returns as a result of having to pay taxes on realized gains.**

Source: GIMA

# Basics of Tax Alpha and Tax Drag

Tax drag is the reduction in an investor's returns as a result of having to pay taxes on realized gains. Tax alpha is the difference between the pretax return—which is most frequently quoted in investment literature—and the after-tax return, which takes into account taxes payable due to realized capital gains in a portfolio. Beyond simply maintaining low portfolio turnover, tax drag may be minimized and tax alpha may be maximized by using several techniques:

### Deferring Tax Losses and Tax Payments

Tax losses can be deferred over multiple calendar years, offsetting future tax gains and reducing anticipated payments.

### Efficient Tax-Loss Harvesting

Conducted throughout a calendar year by matching losses and gains for short-term (positions held for a period less than a calendar year) and long-term (positions held for a period of more than a calendar year) investments.

### Multiple Methods of Tax-Lot Trading

An effective tax-management strategy also considers selling securities according to the tax lot identification, which includes the timing and costs of the shares or the "tax lot" and the "cost basis." These sales can be categorized in various ways, including "first in, first out" (FIFO), which means the oldest purchased tax lot is the first to be sold and, "last in, first out" (LIFO), which means the most recently purchased tax lot is the first to be sold. Other methods include 'highest cost', 'lowest cost', 'average cost' and 'specific lot'.

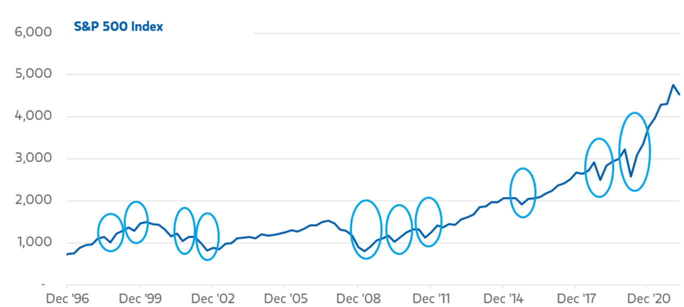
### IRS 30-Day Wash-Sale Rule

IRS rules stipulate that if a security is sold by an investor at a loss, that loss will be disallowed if the investor has acquired (or has entered into a contract or option on) the same or substantially identical securities 30 days before or after the sale that generated the loss. This so-called "wash sale" rule is applied with respect to all of the investor's transactions across all accounts.

### Market Volatility

Market volatility is a meaningful element for generating tax alpha (see Exhibit 2). In periods of increased volatility, losses can be harvested and applied against future gains.

### Exhibit 2: Volatility in Equity Markets Creates Tax-Loss Harvesting Opportunities




The circles indicate periods of volatility.
Source: Bloomberg as of March 31, 2022.

# Benefits of Tax-Managed Strategies

The desire for additional alpha generation from tax management has driven the proliferation of tax-managed strategies. GIMA believes that tax-managed strategies offered in the SMA format can serve as an attractive option for those clients that can meet the funding minimum (typically $250,000), because these SMAs can employ a number of beneficial tools and strategies:

### Tax-Loss Harvesting

SMAs typically employ optimized algorithms to systematically harvest losses within a portfolio that is passively tracking a specific index. Rebalancing in these portfolios will typically be done quarterly, monthly or even more frequently to take advantage of market volatility, based on the desired tracking error defined by the client.

SMAs seek to avoid generating wash sales within client SMA accounts. When they sell a security (i.e., anything with a CUSIP, such as a stock or mutual fund) for a loss they seek to replace it with a similar—but not substantially identical—security within a 30-day period, thereby maintaining the same exposure within a portfolio. For example, during periods of market volatility, the shares of a leading soft drink company (Stock A) decline in value, thus incurring losses in a portfolio. The tax-managed SMA will sell the shares of stock A and buy a similar, but not substantially identical, soft drink company (Stock B). The losses incurred from selling Stock A will offset gains elsewhere in the portfolio, while holding Stock B for 30 days will ensure similar industry and risk exposures are maintained. On the 31st day, the SMA may sell the shares of Stock B and repurchase shares of Stock A.

### Index Replication

SMAs built to mirror a specific index allow investors to own all the underlying securities while also offering flexibility in harvesting losses within a portfolio without having to sell the entire account, and can pass along those losses to the investor to offset gains elsewhere. When a tax-managed SMA aims to mimic an index, it budgets a low tracking error to deliver after-tax alpha.

### Timing of Gains

SMAs also allow more tax-efficient liquidation when an investor needs cash. With a tax-managed SMA, the manager can choose the securities with the highest cost basis tax lots, seeking to potentially maximize tax losses on the sale. SMA managers will also seek to manage the timing of the transactions, favoring long term over short term.

### Customization

Tax-managed SMAs allow investors to build customized portfolios to manage specific risks, screen for environmental, social and governance (ESG) requirements, and even exclude particular sectors, industries or individual stocks. Investors can also fund tax-managed SMAs with securities instead of cash, make charitable donations of specific securities, and take a more tailored risk approach to meet after-tax objectives.

# Applicable Investment Methods

The following actions need to be taken by an investor working with his or her Financial Advisor, as well as the SMA manager, to take full advantage of the benefits described above:

### Design a Desired Portfolio

The SMA strategies offered by leading managers allow individual investors to create portfolios that mirror the pretax returns of a specific index, a blend of indexes or active strategy while also matching the characteristics, risks and factor exposures of the determined benchmark. Further customization can allow for screens that provide for factor tilting, sustainability and impact investing, or can achieve diversification away from specific industries or investment styles.

### Determine the Tracking Error

Tracking error shows the dispersion between the performances of a portfolio and the selected benchmark. The lower the figure, the closer the performance of a portfolio is to the benchmark. For tax-managed SMAs, the tracking error is typically kept below 1% to generate the maximum possible tax alpha with the least deviation from the benchmark's returns.

For accounts with existing securities, an investor may opt to target a higher tracking error in order to achieve a desired amount of losses in a portfolio. Higher tracking error can create higher tax alpha in earlier years, but can also result in eroding the potential for future tax alpha in future years. A transition analysis (see below and Exhibit 3, page 4) can help determine what is most appropriate for a specific account.

### Exhibit 3: Sample Transition Analysis

| | | | CUSTOM CORE | | |
|---|---|---|---|---|---|
| | PRE-EXISTING PORTFOLIO | BENCHMARK: S&P500 | SCENARIO A | SCENARIO B | SCENARIO C |
| Total Portfolio | $1,625,931 | | $1,625,931 | $1,625,931 | $1,625,931 |
| Securities Value | $1,570,426 | | $1,615,867 | $1,618,392 | $1,617,227 |
| Cash Value | $55,505 | | $10,064 | $7,539 | $8,704 |
| Cost Basis | $1,176,957 | | $1,470,886 | $1,330,819 | $1,222,828 |
| Number of Securities | 33 | | 300 | 252 | 200 |
| Dividend Yield | 1.1 | 1.9 | 1.9 | 1.8 | 1.5 |
| Weighted Avg. Cap (millions) | $170,128 | $195,095 | $195,234 | $189,610 | $178,214 |
| Price/Earnings | 30.7 | 23.5 | 23.5 | 24.0 | 25.7 |
| Non-Benchmark Holdings Weight | 0.0% | | 0.0% | 0.0% | 0.0% |
| Tracking Difference | **3.5%** | | **0.3%** | **1.2%** | **2.1%** |

Source: Parametric Portfolio Associates

### Conduct a Transition Analysis

If the account has existing securities, the SMA manager will work with the Financial Advisor to determine whether an investor should fully or partially transition the account into the tax-managed strategy. Such an analysis would outline gain/loss outcomes from the transition for selected tracking error targets (see Exhibit 3, page 4).

In this example, the hypothetical investor wants to convert a portfolio of securities with specified unrealized gains/ losses into a tax-managed SMA. The three scenarios show different choices in the number of transactions as well as the resulting tracking error needed to achieve a desired amount of gains/losses.

### Regularly Monitor and Rebalance

Regular portfolio monitoring is compulsory to take advantage of tax-loss harvesting opportunities. SMA managers covered by GIMA (see Exhibit 4, page 5) can optimize a portfolio through periods of volatility, selling holdings that are exhibiting losses, while matching key risk characteristics and exposures in the benchmark. Every time a portfolio experiences a trade and losses are harvested, it is also rebalanced to maintain weightings.

## Industry Players

While the tax-managed SMA space lacks formalized peer groups—from either Morningstar or PSN, GIMA covers a number of strategies and has long-standing experience evaluating top players.

In the equity universe, the managers that GIMA covers have increased their tax-managed investment options across multiple benchmarks and asset classes, including global and ESG-focused benchmarks.

- Parametric Portfolio Associates*: $161.1 billion in dedicated tax-managed strategies as of March 31, 2022.
- Goldman Sachs: $102.4 billion in dedicated tax-managed strategies as of March 31, 2022, with the majority of those assets in equity products.
- Aperio Group: $54.9 billion in AUM in dedicated tax-managed strategies as of March 31, 2022.

* GIMA notes that Morgan Stanley completed the acquisition of Eaton Vance, which is affiliated with Parametric Portfolio Associates, in the first quarter of 2021. Morgan Stanley Investment Management (MSIM) and Morgan Stanley Wealth Management (MSWM), of which GIMA is a part, are both affiliates of Morgan Stanley & Co.

## Fees and Risks

Manager fees for these SMAs are typically between 18 basis points and 25 basis points, depending on the size of the account and the manager. Total fees include manager fees, plus fees to the Financial Advisor and overlay fees.

As these strategies are set up to mirror specific indexes like passive products with low tracking error, there is likely to be lower active risk. However, it is important to note that the portfolio could be at risk of underperforming in periods where active management is rewarded, particularly during periods of high volatility.

## Exhibit 4: Tax Managed SMAs Covered By GIMA

| NAME | STATUS | INVESTMENT STYLE | SUB-STYLE | | MINIMUM ACCOUNT ($1,000) | MANAGER FEES(BPS) |
|---|---|---|---|---|---|---|
| **Parametric Portfolio Associates Custom Core Strategies** | | | | | | |
| Parametric Portfolio Associates Custom Core S&P 500 | Focus | US Large Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core Russell 3000 | Focus | US Large Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core MSCI EAFE | Approved | International Equities | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core KLD 400 | Approved | US Large Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core US Large Cap Gender Lens | Approved | US Large Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core US Large-Mid Cap Core | Approved | US Large Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core US Large-Mid Cap Growth | Approved | US Large Cap Growth | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core US Large-Mid Value | Approved | US Large Cap Value | Traditional Value | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core US Mid Cap | Approved | US Mid Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core US Small Cap | Approved | US Small Cap | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core Developed Intl' Gender Lens | Approved | International Equities | Blend | UMA; CES | 250 | 18 |
| Parametric Portfolio Associates Custom Core Developed World ADR | Approved | Global Equities | Blend | UMA; CES | 400 | 18 |
| Parametric Portfolio Associates Custom Core Global ADR | Approved | Global Equities | Blend | UMA; CES | 550 | 18 |
| Parametric Portfolio Associates Custom Core Global ex-US ADR | Approved | International Equities | Blend | UMA; CES | 400 | 18 |
| Parametric Portfolio Associates Custom Core Passive | Approved | US Equities Other | Custom Passive | CES | 250 | 18 |
| Parametric Tax Harvest Core US Broad Cap | Approved | US Large Cap | Blend | UMA; CES | 75/500 | 18 |
| Parametric Tax Harvest Core US Large Cap | Approved | US Large Cap | Blend | UMA; CES | 75/500 | 18 |
| **Parametric Portfolio Associates Multi-Asset Strategies** | | | | | | |
| Russell 3000/Intermediate Laddered Corporate | Approved | US Multi Asset | Balanced Blend | UMA | 500 | ~ 22 |
| Russell 3000/Intermediate Laddered Muni | Approved | US Multi Asset | Balanced Blend Tax Favored | UMA | 500 | ~ 22 |
| Russell 3000/Short Laddered Muni | Approved | US Multi Asset | Balanced Blend Tax Favored | UMA | 500 | ~ 22 |
| S&P 500/Intermediate Laddered Corporate | Approved | US Multi Asset | Balanced Blend | UMA | 500 | ~ 22 |
| S&P 500/Intermediate Laddered Muni | Approved | US Multi Asset | Balanced Blend Tax Favored | UMA | 500 | ~ 22 |
| S&P 500/Short Laddered Muni | Approved | US Multi Asset | Balanced Blend Tax Favored | UMA | 500 | ~ 22 |
| S&P 500/MSCI EAFE Intermediate Laddered Corporate | Approved | Global Multi Asset | Balanced Blend | UMA | 750 | ~ 22 |
| S&P 500/MSCI EAFE Intermediate Laddered Muni | Approved | Global Multi Asset | Balanced Blend Tax Favored | UMA | 750 | ~ 22 |
| S&P 500/MSCI EAFE Short Laddered Muni | Approved | Global Multi Asset | Balanced Blend Tax Favored | UMA | 750 | ~ 22 |
| Custom Multi-Asset (CES) Tax-Advantaged 30/70;50/50;70/30 | Approved | US Multi Asset | Balanced Tax Favored | CES | 2,000 | ~22 |
| Custom Multi-Asset (CES) Taxable 30/70;50/50;70/30 | Approved | US Multi Asset | Balanced | CES | 2,000 | ~22 |
| **Goldman Sachs** | | | | | | |
| Goldman Sachs Tax Advantaged Core -- S&P 500 | Approved | US Large Cap | Blend | UMA; CES | 250 | 20 |
| Goldman Sachs Tax Advantaged Core -- Russell 3000 | Approved | US Large Cap | Blend | UMA; CES | 250 | 20 |
| Goldman Sachs Tax Advantaged Core -- MSCI EAFE ADR | Approved | International Equities | Blend | UMA; CES | 250 | 20 |
| **Aperio Group** | | | | | | |
| Aperio Group Custom Strategies by index, see below:<br>S&P 500,<br>Russell 1000, Russell 3000<br>MSCI World, MSCI ACWI, MSCI EAFE,<br>MSCI World Ex-US, MSCI ACWI Ex-US<br>Advisor Specified Blends | Approved | US Equities Other | US Equities Other | CES | 1,000 | 25 |
| Aperio Group Active Tax Management Developed World Equity | Approved | Global Equities | Blend | CES | 1,000 | 25 |

Source: GIMA, Parametric Portfolio Associates, Goldman Sachs, Aperio Group *Manager fees exclude fees to the Financial Advisor and overlay fees.

On the other hand, it is important to realize that the tax-loss harvesting component of these products could mitigate this, allowing the portfolio to reap losses to offset gains elsewhere. Another potential risk could come from choosing the wrong tracking error for the portfolio. If the client sets a tracking error that is too low, then there is the risk that the portfolio would not capture enough losses during periods of volatility.

On the other hand, if the chosen tracking error is too high, the portfolio could underperform by a larger percentage and erase the benefit of tax-loss harvesting. The client and Financial Advisor would need to continuously monitor the desired tracking error to be consistent with the tax-loss harvesting goals.

## Conclusion

Tax-managed SMAs offer investors the opportunity to replicate broad-based market indexes with the option of enhanced customized screens, while also providing active tax management to potentially generate higher after-tax excess returns. With increased market volatility, the potential for such strategies to realize tax alpha amid the current environment is notable and could serve higher-income investors well.

GIMA covers a number of offerings on the UMA and CES platforms to fulfill this need. These managers have a proven track record of helping investors offset the impact of taxes on their portfolios, while also maintaining a desired exposure to a targeted benchmark.

Another option investors and their Financial Advisors should consider is the tax management overlay available through Morgan Stanley's Private Portfolio Group. This group will harvest losses experienced by a client's existing SMAs, mutual funds or ETFs by offsetting the exposure with a similar ETF, so as not to violate the wash-sale rule.

# Disclosure Section

Definitions

**MSCI All Country World Index -** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of country indices comprising developed and emerging market country indices.

**MSCI All Country World Index Ex USA -** The MSCI ACWI (All Country World Index) ex USA Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets excluding the United States.

**MSCI EAFE Index -** is composed of all the publicly traded stocks in developed non-U.S. Markets.

**MSCI KLD 400 Social Index** is a capitalization weighted index of 400 US securities that provides exposure to companies with outstanding Environmental, Social and Governance (ESG) ratings and excludes companies whose products have negative social or environmental impacts.

**MSCI World ex USA Index** captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries excluding the United States.

**MSCI World Index** - The MSCI World Index is a free float-adjusted market capitalization index that is designed to measure global developed market equity performance. The MSCI World Index consisted of the following 24 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States.

**Russell 1000 -** Russell 1000 Index measures the performance of the 1,000 largest US companies based on total market capitalization.

**Russell 3000 -** Russell 3000 Index measures the performance of the 3,000 largest US companies based on total market capitalization.

**S&P 500 Index –** S&P 500 Index is an index of 500 stocks chosen for market size, liquidity and industry grouping, among other factors. The S&P 500 is meant to reflect the risk/return characteristics of the large cap universe. Companies included in the index are selected by the S&P Index Committee, a team of analysts and economists at Standard & Poor's. The S&P 500 is a market value weighted index - each stock's weight is proportionate to its market value.

**Sub-Styles:** Subjective classifications designed to assist with manager selection and performance evaluation based on GIMA's understanding of a manager's long-term investment philosophy and portfolio structuring biases and techniques. At points in time managers may display attributes of other sub-style classifications, and these classifications may change due to changes in the capital markets, evolution of performance benchmarks, industry trends, or changes involving a manager's personnel or process.

**Balanced Blend:** Invests in both equities and fixed income securities. Equity portion blends growth and value stocks at different times in differing proportions due to a lack of significant long-term bias in either style direction. Fixed income component typically focuses on investment grade securities, but may have some exposure to non-investment grade bonds (see Portfolio Traits and Investment Philosophy & Process section for more details).

**Balanced Blend Tax Favored:** Invests in both equities and fixed income securities. Equity portion blends growth and value stocks at different times in differing proportions due to a lack of significant long-term bias in either style direction. Fixed income component typically focuses on investment grade municipal bonds, but may have some exposure to non-investment grade securities (see Portfolio Traits and Investment Philosophy & Process section for more details).

**Blend**: Flexible managers that may invest in a blend of growth and value stocks at different times and in differing proportions due to a lack of a significant long-term bias in either style direction, and may have benchmark-constraints and tracking error guidelines such that performance and characteristics are similar to the respective benchmark.

**Custom Passive:** Will generally make investments to replicate the performance, portfolio characteristics, and risk statistics of a specific market index selected by the client, while maintaining low tracking and high R^2 metrics. See Asset Class and Other Risks within the Important Disclosures section for more information pertaining to preferred securities.

**Traditional Value**: Tend to search for what they believe to be undervalued companies based on traditional valuation measures such as P/E ("Price/Earnings"), P/CF ("Price/Cash Flow") and P/B ("Price/Book") and typically have a greater awareness of and correlation to the benchmark although not necessarily strict constraints.

**US Equities Other:** Includes those US equity strategies that do not align with the major industry sub-styles. These may include sector ETFs/mutual funds and custom equity strategies.

Glossary of Terms

**Active Share** – is a measure of the percentage of stock holdings in a manager's portfolio that differ from the benchmark index; Active Share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the manager's portfolio versus the weight of each holding in the benchmark index and dividing by two.

**ADRs** – American Depositary Receipts are U.S. dollar denominated forms of equity ownership in non-U.S. companies. These shares are issued against the local market shares held in the home market. ADRs are typically listed on U.S. exchanges such as NYSE, AMEX and NASDAQ.

**Alpha** – measures the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by Beta. A positive Alpha figure indicates the portfolio has performed better than its Beta would predict. A negative Alpha indicates the portfolio's underperformance given the expectations established by the Beta. The accuracy of the Alpha is therefore dependent on the accuracy of the Beta. Alpha is often viewed as a measurement of the value added or subtracted by a portfolio's manager.

**Beta** – measures a portfolio's volatility relative to its benchmark. A portfolio with a Beta higher than 1.0 has historically been more volatile than the benchmark, while a portfolio with a Beta lower than 1.0 has been less volatile. The accuracy of the Beta is dependent on R-Squared.

**Correlation –** measures the degree to which the returns of two securities or indices are related. The range of possible correlations is between 1.0 and -1.0. Positive correlation indicates that returns tend to move in the same direction. Negative correlation indicates that returns tend to move in opposite directions. Zero correlation implies that there is no relationship between the securities' returns.

**EPS Growth – Forecast** – a measure of one year earnings (cash flow or dividends) per share growth from the prior fiscal year (FY0) to the current fiscal year (FY1) using analyst consensus forecasts. Growth is expressed as a percent. The FY1 EPS (earnings per share) growth rate for the portfolio is a weighted average of the forecasts for the individual stocks in the portfolio.

**EPS Growth – 5 Year Historical** – The weighted average annualized earnings per share growth for a portfolio over the past five years.

**Excess Return** – represents the average quarterly total return of the portfolio relative to its benchmark. A portfolio with a positive Excess Return has on average outperformed its benchmark on a quarterly basis. This statistic is obtained by subtracting the benchmark return from the portfolio's return.

**Historical EPS Growth** - calculated by regressing over time the quarterly earnings per share for the past 20 quarters to determine the share's historical growth rate in earnings. The quarterly historical growth rate for each share is then annualized and the Historical EPS Growth shown in this report is the weighted average of these results.

**Long Term EPS Growth Rate** – analyst consensus of expected annual increase in operating earnings per share over the company's next full business cycle - usually three to five years. The Long Term EPS Growth Rate for the portfolio is a weighted average of the results for the individual stocks in the portfolio.

**P/E - Forecast 12-Mo. –** The price/earnings ratio for the stock based on the most recent closing price divided by the annual mean expected earnings for the current fiscal year (FY1 EPS forecast). P/E for the portfolio is a weighted average of the results for the individual stocks in the portfolio.

**P/E – Trailing 12-Mo. –** the current price of a stock divided by the most recent 12 months trailing earnings per share. P/E for the portfolio is a weighted average of the results for the individual stocks in the portfolio.

**Price-to-Book –** price per share divided by book value per share. Price-to-Book for the portfolio is a weighted average of the results for the individual stocks in the portfolio.

**R-Squared ($R^2$)** – represents the percentage of the volatility of returns that is attributable to movements of the benchmark. It is a measure of "co-movement" between portfolio returns and benchmark returns. The closer the portfolio's $R^2$ is to 100%, the more closely the portfolio correlates to, or follows, the benchmark. Generally, highly diversified portfolios have higher $R^2$ percentages.

**Return on Equity (ROE)** – is another profitability ratio which gauges return on investment by measuring how effectually stockholder money is being employed by the company. ROE is calculated by dividing a company's net income by average total equity. Unlike Return on Assets (ROA), ROE considers the degree to which a company uses leveraging, as interest expense paid to creditors is generally deducted from earnings to arrive at net income. ROE for the portfolio is a weighted average of the results for the individual stocks in the portfolio.

**Sharpe Ratio** – measures a portfolio's rate of return based on the risk it assumed and is often referred to as its risk-adjusted performance. Using Standard Deviation and returns in excess of the returns of T-bills, it determines reward per unit of risk. This measurement can help determine if the portfolio is reaching its goal of increasing returns while managing risk.

**Standard Deviation** – quantifies the volatility associated with a portfolio's returns. The statistic measures the variation in returns around the mean return. Unlike Beta, which measures volatility relative to the aggregate market, Standard Deviation measures the absolute volatility of a portfolio's return.

**Tracking Error** – represents the Standard Deviation of the Excess Return. This provides a historical measure of the variability of the portfolio's returns relative to its benchmark. A portfolio with a low Tracking Error would have quarterly Excess Returns that have exhibited very low volatility.

## Important Disclosures

<u>Report for Use Only in Investment Advisory Programs</u>

This report is only to be used in Morgan Stanley Wealth Management investment advisory programs and not in connection with brokerage accounts.

<u>The Global Investment Manager Analysis (GIMA) services Only Apply to Certain Investment Advisory Programs</u>

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.

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. GIMA may, but is not obligated to, note the Watch status in this report with a "W" or "Watch" next to the "Status" on the cover page.

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 "GIMA at a Glance".

No Obligation to Update

Morgan Stanley Wealth Management has no obligation to update you when any information or opinion in this report changes.

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.

Overlay Managers or Executing Sub-Managers ("managers") in some of Morgan Stanley's Separately Managed Account ("SMA") programs may affect transactions through broker-dealers other than Morgan Stanley or our affiliates. If your manager trades with another firm, you may be assessed costs by the other firm in addition to Morgan Stanley's fees. Those costs will be included in the net price of the security, not separately reported on trade confirmations or account statements. Certain managers have historically directed most, if not all, of their trades to outside firms. Information provided by managers concerning trade execution away from Morgan Stanley is summarized at: www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf. For more information 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.

Consider Your Own Investment Needs

This report is not intended to be a client specific analysis or recommendation, an offer to participate in any investment, or a recommendation to buy, hold or sell securities (includes securities of Morgan Stanley, and/or their affiliates if shown in this report). Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon.

Performance and Other Portfolio Information

*General*

*Past performance does not guarantee future results*. There is no guarantee that this investment strategy will work under all market conditions. As a result of recent market activity, current performance may vary from the performance referenced in this report.

For mutual funds, the investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. To obtain performance information, current to the most recent month-end, please contact the fund directly at the website set out on the cover page of this report.

*Benchmark index*

Depending on the composition of your account and your investment objectives, any indices shown in this report may not be an appropriate measure for comparison purposes and are therefore presented for illustration only.

Indices are unmanaged. They do not reflect any management, custody, transaction or other expenses, and generally assume reinvestment of dividends, accrued income and capital gains. Past performance of indices does not guarantee future results. You cannot invest directly in an index.

Performance of indices may be more or less volatile than any investment product. The risk of loss in value of a specific investment (such as with an investment manager or in a fund) is not the same as the risk of loss in a broad market index. Therefore, the historical returns of an index will not be the same as the historical returns of a particular investment product.

*Other data*

Portfolio analysis may be based on information on less than all of the securities held in the portfolio. For equity portfolios, the analysis typically reflects securities representing at least 95% of portfolio assets. This may differ for other strategies, including those in the fixed income and specialty asset classes, due to availability of portfolio information.

Other data in this report is accurate as of the date this report was prepared unless stated otherwise. Data in this report may be calculated by the investment manager, Morgan Stanley Wealth Management or a third party service provider, and may be based on a representative account or a composite of accounts.

*Securities holdings*

Holdings are subject to change daily, so any securities discussed in this report may or may not be included in your portfolio if you invest in this investment product. Your portfolio may also include other securities in addition to or instead of any securities discussed in this report. Do not assume that any holdings mentioned were, or will be, profitable.

<u>Sources of Data</u>

Material in this report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness or timeliness. Third party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data.

<u>Asset Class and Other Risks</u>

Investing in ***stocks***, ***mutual funds*** and ***exchange-traded funds ("ETFs")*** entails the risks of market volatility. The value of all types of investments may increase or decrease over varying time periods. Besides the general risk of holding securities that may decline in value, ***closed-end funds*** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

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.

***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.

***International securities*** may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in ***emerging markets and frontier markets.***

***Small- and mid- capitalization*** companies may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies.

***Asset allocation and diversification*** do not assure a profit or protect against loss in declining financial markets.

***Nondiversification:*** For 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.

Because of their narrow focus, ***sector investments*** tend to be more volatile than investments that diversify across many sectors and companies.

***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.

<u>No Tax Advice</u>

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

If any investments in this report are described as “tax free”, the income from these investments may be subject to state and local taxes and (if applicable) the federal Alternative Minimum Tax. Realized capital gains on these investments may be subject to federal, state and local capital gains tax.

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.



RSI1653664376243 05/2022