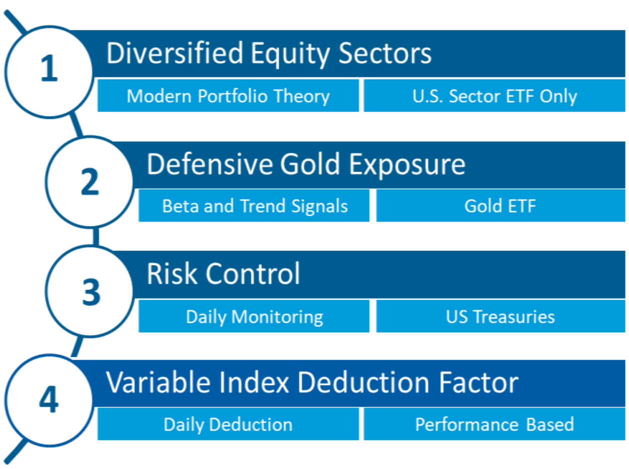
Morgan Stanley

Morgan Stanley Enhanced Allocation Index

Index Philosophy



INDEX IDENTIFIER (TICKER):
MSUSMSEA

WEBSITE:
morganstanley.com/indices/#/msea

INDEX CALCULATION AGENT:
Morgan Stanley & Co. LLC

INDEX LIVE DATE:
August 27, 2021

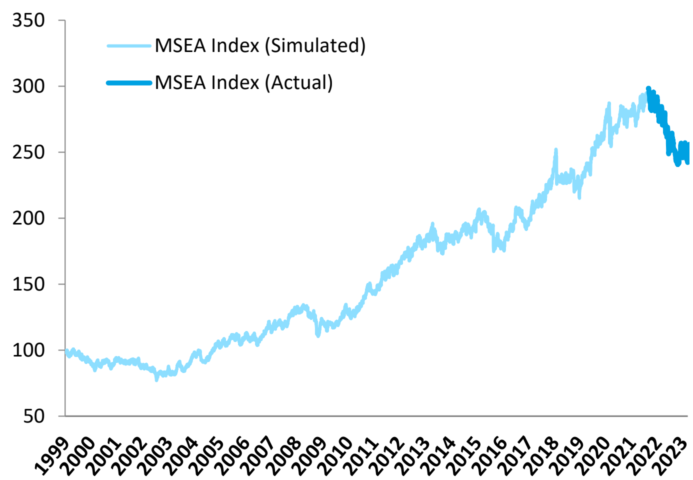
NUMBER OF INDEX COMPONENTS:
11 US sector ETFs, Gold ETF, 2 Year and 10 Year Treasuries

REBALANCE FREQUENCY:
Daily

VOLATILITY TARGET:
10% Annualized

Please see Notes on Simulated Returns, page 3

Index Performance, Simulated and Actual*



Source: Morgan Stanley, Bloomberg.

Summary Statistics, Simulated and Actual*

YTD Return	3.89%
Return Since Index Live Date**	-8.35%
1-Year Ann. Return	-6.67%
3-Year Ann. Return	-1.04%
5-Year Ann. Return	2.08%
10-Year Ann. Return	2.86%
1-Year Ann. Volatility	10.88%
10-Year Ann. Volatility	10.35%
10-Year Sharpe Ratio	0.28
Correlation to MSCI World Index	48%
Correlation to S&P GSCI Index	18%
Correlation to U.S. Dollar Index	-29%
Correlation to Bloomberg Barclays U.S. Agg. Index	45%

Source: Morgan Stanley, Bloomberg.
** Actual Return if less than 1yr since Index Live Date; if not, Annualized Return is used.
* From January 4, 1999 to March 31, 2023.
The Index Live Date is August 27, 2021. All data prior to that are simulated.
Past performance is not indicative of future performance.

Index Construction

The Morgan Stanley Enhanced Allocation Index ("MSEA Index" or the "Index") provides exposure to eleven exchange traded-funds (ETFs) chosen to represent different US equity sectors (such as Energy, Technology, Health Care, etc.) as well as exposure to a Gold ETF. The index allocates between the ETF portfolio and a dynamic US Treasury index to target 10% volatility.

Diversified Equity Sectors plus Gold – The Index provides exposure to a subset of US equity sectors by following trends in their performances. The Index allocates using principles based on Markowitz's Modern Portfolio Theory (MPT) and adds a defensive allocation to Gold based on the beta of the equity portfolio and a gold trend signal.

Risk Control – The Index targets a 10% volatility by adjusting its allocation on a daily basis. If the Index´s holdings experience significant changes in volatility, the Index will rebalance the allocation in order to bring the holdings' volatility back to the target level of volatility.

Variable Index Deduction Factor – Dynamic fee mechanism built within the index allows for a larger allocation to risk assets and greater participation to upside performance in a cost controlled manner.

There are risks associated with the Index, including that the performance of the Index is reduced by a variable index deduction factor that scales upward based on positive recent performance of the Index, up to a maximum of 0.15% per business day or up to approximately 37.8% per year. Such index deduction is applied when calculating the level of the Index and is a function of Index performance and will vary based on such performance. In addition, the Index includes (i) transactional and financing costs based on rebalances and exposures respectively across all ETFs and Treasury Futures and (ii) a deduction of the Federal Funds rate that would apply to a cash investment linked to the Index, each of which will reduce the Index level and the returns of any investment linked to the Index. Please see pages 3 and 4 for further information.

Defensive Base Index Components

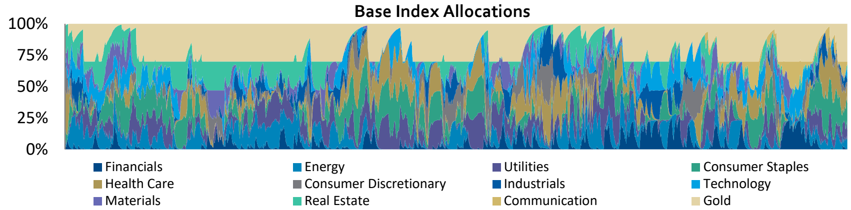
Investment Universe

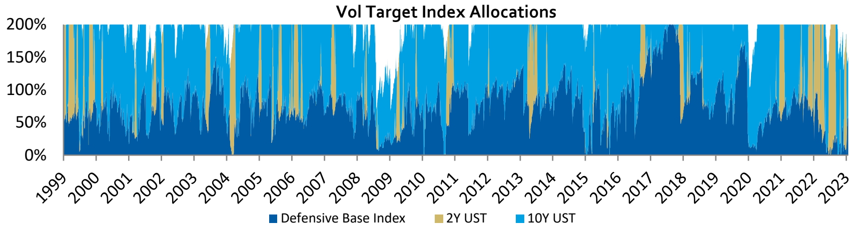
ASSET CLASS	INDEX COMPONENT	MAX ALLOCATION
US EQUITIES		
	Financial ETF	33%
	Energy ETF	33%
	Utilities ETF	33%
	Consumer Staples ETF	33%
	Health Care ETF	33%
	Consumer Discretionary ETF	33%
	Industrial ETF	33%
	Technology ETF	33%
	Materials ETF	33%
	Real Estate ETF	33%
	Communication ETF	33%
	Gold ETF	30%
US TREASURY FUTURES		
	10 Year Treasuries	200%
	2 Year Treasuries	200%

Multi-Step Allocation Mechanism to Index Components

- The **Sector Index** constructs a portfolio of **11 different US equity sector ETFs** using **historical returns and realized volatilities** to **identify the portfolio with highest risk-adjusted returns**, subject to allocation and risk constraints.
- The **Defensive Base Index** allocates **up to 30% into a Gold ETF** based on the sector ETF portfolio's beta as well as a trend signal on gold, and the remainder to the sector ETF portfolio
- The **US Treasury Index** is a trend based index of 2 Year and 10 Year US Treasury Futures which serves as a low volatility asset
- The risk control mechanism then allocates between the Defensive Base Index and the US Treasury Index to target **10% volatility**.
- Finally, the Index utilizes a momentum fee to reduce the daily performance by up to 15bps if the performance of the index vs. its moving average is strongly positive

Index Composition*





Volatility Targeted Index Monthly Allocations*

Average Leverage (Curr. Month): 34.7%	Average VT Allocations[1]	Monthly VT Allocations[1]	Cumulative Return Attributions[2]
ETF Description	**Full History**	**March 2023**	**March 2023**
Financials	6%	0%	-0.01%
Energy	9%	8%	0.22%
Utilities	10%	10%	0.12%
Consumer Staples	10%	19%	0.47%
Health Care	9%	10%	0.19%
Consumer Discretionary	6%	5%	0.23%
Industrials	5%	4%	0.03%
Technology	8%	5%	0.20%
Materials	5%	1%	0.00%
Communication	1%	5%	0.18%
Real Estate	9%	3%	0.18%
Gold	23%	30%	0.62%

Variable Index Deduction Factor

To determine the variable index deduction factor for the following day, the Index level is compared to its own recent moving average ('MA'), using a window of approximately one month:

- If the **Index is significantly below its MA**, the variable index deduction factor reduces, down to a minimum of **0.00% per day**.
- If the Index is equal its MA, the variable index deduction factor is 0.002% per day.
- If the **Index is significantly above its MA**, the variable index deduction factor increases, up to a maximum of **0.15% per day**

Index Level	**97.0**	**100.0**	**103.0**
Moving Average	**100.0**	**100.0**	**100.0**
Next Day's Variable Index Deduction Factor	0.00002%	0.0020%	0.0726%

* As of March 31, 2023. The Index Live Date is August 27, 2021. All data prior to that are simulated.

[1] Computed as the average of the daily allocations over the corresponding month, before applying leverage.

[2]The sum of the index components' return attribution is not equal to the Index return over that month due to costs, variable index fee and return compounding effects. Individual return attributions are calculated after applying leverage.

Certain Key Risks

- The Index level may decrease due to a number of factors including trends in the markets for the underlying components.
- The Index's volatility scaling mechanism makes use of leverage and may result in exposures different from one-for-one to the Base Index. This may lead to underperformance in both downward and upward markets.
- The level of the Index reflects a variable index deduction factor that scales upward based on positive recent performance of the Index, up to a maximum of 0.15% per business day or up to approximately 37.8% per year.
- In addition, the level of the Index reflects a deduction of the Federal Funds rate that would apply to an equivalent cash investment and the Index return will therefore be lower than it would be absent such excess return cost. In addition, an increase in the Federal Funds rate will further negatively affect the performance of the Index.
- The Index level is adjusted for notional costs associated with trading ETFs and futures as well as the deduction of a variable index deduction factor applied on the Index, both of which will reduce the Index level and the returns of investments linked to the Index.
- The weights applied to the underlying ETFs may not be the optimal weights.
- It is possible that the Index may be composed of a very small number of index components at any time.
- The Index has a limited performance history and past performance is not an indication of future performance.

The risks identified above are not exhaustive. Please see the full set of risk factors included in any disclosure materials relating to instruments linked to the Index for additional information.

NOTE ON SIMULATED RETURNS:

Back-testing and other statistical analyses provided herein use simulated analysis and hypothetical circumstances to estimate how the Index may have performed prior to the publication date for the Index. The results obtained from such "back-testing" should not be considered indicative of the actual results that might be obtained from an investment in the Index. The actual performance of the Index may vary significantly from the results obtained from back-testing. Unlike an actual performance record, simulated results are achieved by means of the retroactive application of a back-tested model itself designed with the benefit of hindsight and knowledge of factors that may have possibly affected its performance. Morgan Stanley does not assure or guarantee that any product linked to the Index will operate or would have operated in the past in a manner consistent with these materials. Calculation based on simulated performance is purely hypothetical and may not be an accurate or meaningful comparison. Past performance (actual or simulated) is not indicative of future results. Because certain ETFs existed for only a portion of the back-tested period, substitute data has been used for portions of the simulation. Wherever data for one or more ETFs did not exist, the simulation has included the value of each ETF's benchmark index inclusive of the relevant current expense ratio.

Index Monthly Returns*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full Year
2023	**2.70%**	**-3.36%**	**4.67%**										
2022	**-4.76%**	**0.33%**	**-1.74%**	**-3.14%**	**0.19%**	**-4.03%**	**3.27%**	**-4.71%**	**-3.07%**	**0.55%**	**2.54%**	**-1.92%**	**-15.65%**
2021	*-1.80%*	*-1.81%*	*1.53%*	*2.60%*	*3.10%*	*-2.21%*	*2.61%*	1.56%	**-5.26%**	**1.89%**	**-1.51%**	**3.04%**	*3.36%*
2020	*0.05%*	*-5.98%*	*2.81%*	*1.56%*	*0.91%*	*0.22%*	*4.18%*	*-0.29%*	*-2.04%*	*-2.59%*	*3.60%*	*1.45%*	*3.48%*
2019	*4.44%*	*-0.15%*	*2.42%*	*1.59%*	*-3.42%*	*7.64%*	*-1.37%*	*4.56%*	*-0.53%*	*1.61%*	*0.08%*	*4.23%*	*22.66%*
2018	*4.41%*	*-6.98%*	*0.61%*	*-1.40%*	*0.80%*	*-0.58%*	*-0.02%*	*3.64%*	*-0.05%*	*-5.86%*	*3.43%*	*-3.23%*	*-5.76%*
2017	*2.20%*	*5.14%*	*-0.48%*	*2.02%*	*1.09%*	*-1.35%*	*3.31%*	*-0.15%*	*1.11%*	*2.87%*	*1.88%*	*2.00%*	*21.32%*
2016	*2.18%*	*1.65%*	*1.57%*	*2.30%*	*-1.12%*	*7.20%*	*0.26%*	*-1.61%*	*1.05%*	*-3.54%*	*-2.52%*	*1.18%*	*8.50%*
2015	*3.33%*	*-1.43%*	*1.02%*	*-1.05%*	*0.06%*	*-5.53%*	*1.21%*	*-7.78%*	*2.35%*	*1.59%*	*-2.03%*	*-0.62%*	*-9.07%*
2014	*-1.79%*	*3.80%*	*-2.16%*	*0.58%*	*2.56%*	*1.70%*	*-3.29%*	*4.02%*	*-3.27%*	*1.52%*	*3.14%*	*-0.38%*	*6.20%*
2013	*2.53%*	*-0.31%*	*4.27%*	*-0.94%*	*-3.80%*	*-4.16%*	*2.03%*	*-3.65%*	*3.78%*	*3.55%*	*0.60%*	*-0.75%*	*2.67%*
2012	*1.91%*	*0.03%*	*1.57%*	*2.61%*	*-4.34%*	*3.29%*	*2.11%*	*0.98%*	*2.39%*	*-2.48%*	*1.04%*	*-0.90%*	*8.23%*
2011	*-0.36%*	*4.02%*	*0.29%*	*5.86%*	*0.54%*	*-2.67%*	*3.54%*	*0.93%*	*-2.74%*	*1.47%*	*1.81%*	*2.48%*	*15.86%*
2010	*-1.71%*	*2.55%*	*-0.08%*	*2.37%*	*-0.07%*	*2.83%*	*1.85%*	*2.44%*	*4.46%*	*0.47%*	*-1.34%*	*-0.69%*	*13.66%*
2009	*-2.68%*	*-2.91%*	*5.06%*	*-1.27%*	*-1.06%*	*0.39%*	*2.18%*	*1.11%*	*2.28%*	*0.75%*	*6.77%*	*-5.68%*	*4.36%*
2008	*0.60%*	*1.24%*	*0.52%*	*-1.00%*	*-0.38%*	*-3.75%*	*0.54%*	*1.71%*	*-5.91%*	*-8.65%*	*7.95%*	*2.05%*	*-5.91%*
2007	*0.73%*	*1.41%*	*-0.84%*	*2.03%*	*-0.80%*	*-1.74%*	*0.85%*	*2.50%*	*3.82%*	*2.22%*	*1.44%*	*-1.52%*	*10.40%*
2006	*2.71%*	*-2.49%*	*-0.72%*	*2.18%*	*-3.05%*	*-1.11%*	*2.43%*	*2.32%*	*2.09%*	*2.72%*	*4.12%*	*-3.72%*	*7.32%*
2005	*-1.64%*	*3.29%*	*-2.18%*	*1.05%*	*2.40%*	*2.12%*	*-0.36%*	*0.86%*	*-0.53%*	*-5.23%*	*2.39%*	*1.70%*	*3.61%*
2004	*-1.26%*	*2.03%*	*2.05%*	*-7.55%*	*-0.38%*	*1.50%*	*0.78%*	*4.53%*	*1.83%*	*2.85%*	*0.78%*	*1.90%*	*8.89%*
2003	*-2.54%*	*1.45%*	*-0.84%*	*2.31%*	*5.86%*	*-2.23%*	*-3.12%*	*1.54%*	*2.46%*	*2.42%*	*3.01%*	*3.85%*	*14.66%*
2002	*0.10%*	*1.30%*	*-2.63%*	*-1.48%*	*1.87%*	*-3.87%*	*-4.05%*	*3.16%*	*0.73%*	*-0.57%*	*-1.84%*	*3.95%*	*-3.64%*
2001	*0.29%*	*-1.79%*	*-0.28%*	*-0.64%*	*-1.14%*	*-0.51%*	*3.45%*	*-2.18%*	*-0.11%*	*2.37%*	*-4.46%*	*-1.27%*	*-6.31%*
2000	*-4.04%*	*-3.09%*	*6.93%*	*-2.72%*	*-0.46%*	*2.37%*	*0.51%*	*0.90%*	*-2.44%*	*0.10%*	*0.02%*	*4.24%*	*1.80%*
1999	*-8.10%*	*-4.65%*	*1.38%*	*2.50%*	*-2.47%*	*1.29%*	*-3.35%*	*-1.74%*	*1.43%*	*-1.31%*	*-1.59%*	*0.11%*	*-3.86%*

Source: Morgan Stanley, Bloomberg.
* Data based on simulated returns from January 4, 1999 to August 27, 2021 and actual thereafter. Data through March 31, 2023.
Please see Notes on Simulated Returns.
Past performance is not indicative of future performance.

Disclaimer:

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