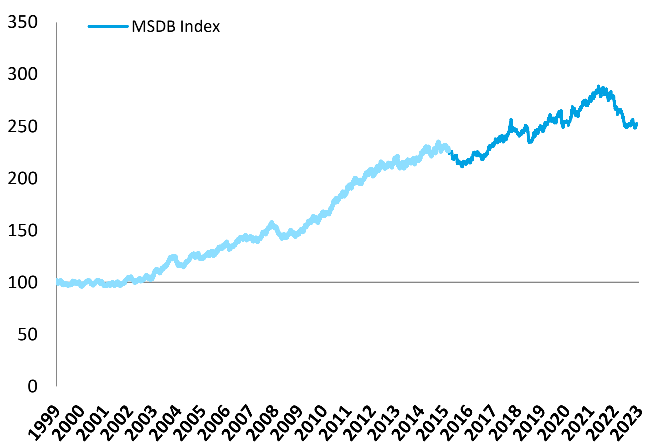
Morgan Stanley

Morgan Stanley Dynamic Balance Index

Index Performance, Simulated and Actual*



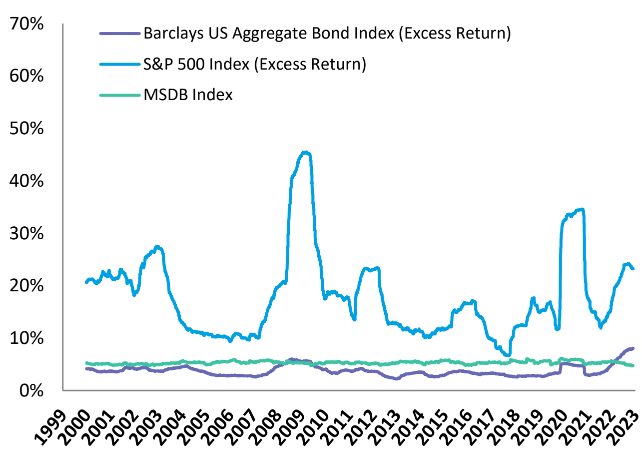
Source: Morgan Stanley, Bloomberg

Summary Statistics, Simulated and Actual*

	MSDB Index	S&P 500 (Excess Return)	Barclays Aggregate Bond (Excess Return)
YTD Return	0.91%	6.27%	1.78%
Return* Since Index Live Date	1.43%	9.76%	-0.05%
1-Year Ann. Return	-9.14%	-10.32%	-7.46%
3-Year Ann. Return	-0.10%	17.29%	-3.85%
5-Year Ann. Return	0.53%	9.43%	-0.68%
10-Year Ann. Return	1.59%	10.99%	0.24%
10-Year Ann. Volatility	5.40%	17.71%	4.23%
10-Year Sharpe Ratio	0.29	0.62	0.06
Full Period Ann. Return	3.95%	4.59%	1.83%
Full Period Max. Drawdown	13.99%	61.81%	19.45%
Correlation to MSDB Index	100.00%	33.02%	31.57%

Source: Morgan Stanley, Bloomberg
Prior to December 21st 2021, the above excess returns calculations were over 3-Month Libor rather than SOFR plus 0.13088%.
** Actual Return if less than 1yr since Index Live Date; if not, Annualized Return is used

1-Year Rolling Volatility*



Source: Morgan Stanley, Bloomberg
* From May 1, 2000 to March 31, 2023.
The Index Live Date is June 30, 2015.
All data prior to that are simulated.

INDEX IDENTIFIER (TICKER):
MSUSMSDB

WEBSITE:
morganstanley.com/msdb

INDEX CALCULATION AGENT:
Morgan Stanley & Co. LLC

INDEX LIVE DATE:
July 1, 2015

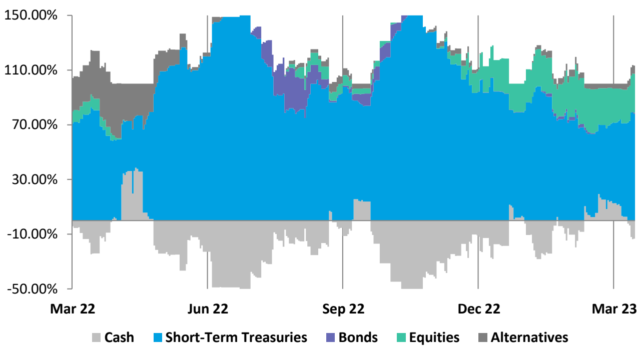
NUMBER OF INDEX COMPONENTS:
Maximum 11

REBALANCE FREQUENCY:
Monthly on average (at intervals during the month)

VOLATILITY TARGET:
5% Annualized

Please see Note on Simulated Returns, page 4

1-Year Trailing Index Composition*



* Includes actual allocation from March 31, 2022 through March 31, 2023.
Source: Morgan Stanley, Bloomberg.

Index Overview

- The Morgan Stanley Dynamic Balance Index (the "Index") offers diversified exposure to a wide range of asset classes by investing in liquid US-listed ETFs and futures-based indices (the "Index Components") representing equities, short-term treasuries, bonds and alternatives. It uses modern portfolio theory principles and the concept of the efficient frontier to attempt to maximize returns for a defined level of risk.
- **Diversified** exposure across equities, short-term treasuries, bonds, alternative investments and cash.
- **Rules-based** strategy, using modern portfolio theory principles to select a portfolio targeting the highest historical returns for a 5% annualized volatility.
- The portfolio is **monitored daily** to attempt to keep volatility under control and reduce the impact of price fluctuations.
- Calculated on an **excess return** basis, meaning that the Index level represents the performance of the portfolio, with a volatility control mechanism, in excess of the performance of a cash investment receiving the Federal Funds rate.
- A **servicing fee of 0.50% per annum**, calculated on a daily basis, is already included in the published Index level.

Monthly Allocations

Asset Class (Max Weight)	Index Component (Bloomberg Ticker)	Month-End Weight *	Previous Month-End Weight**	Change
ST Treasuries (100%)				
Short-Term Treasuries	2-Year US Treasury Note Futures Total Return Index	78.0%	58.2%	19.8%
Equities (100%)				
Developed Market Equities	iShares MSCI EAFE Index Fund (EFA UP Equity)	24.2%	26.4%	-2.2%
Emerging Market Equities	iShares MSCI Emerging Markets Index Fund (EEM UP Equity)	0.0%	4.0%	-4.0%
US Equities	SPDR S&P 500 ETF Trust (SPY UP Equity)	4.3%	0.0%	4.3%
Bonds (75%)				
10Y Treasuries	10-Year US Treasury Note Futures Total Return Index	0.1%	1.2%	-1.1%
Long-Term Treasuries	Long Bond US Treasury Futures Total Return Index	0.0%	0.0%	0.0%
High Yield Bonds	iShares iBOXX High Yield Corporate Bond Fund (HYG UP Equity)	0.7%	0.8%	0.0%
Investment Grade Corporate Bonds	iShares iBOXX Investment Grade Corporate Bond Fund (LQD UP Equity)	0.0%	0.0%	0.0%
Investment Grade Bonds	iShares Core Total U.S. Bond Market ETF (AGG UP Equity)	0.0%	0.0%	0.0%
Alternatives (50%)				
Gold	SPDR Gold Trust (GLD UP Equity)	6.1%	3.4%	2.6%
Real Estate	iShares Dow Jones U.S. Real Estate Index Fund (IYR UP Equity)	0.0%	0.0%	0.0%
Cash (100%)				
Cash	Cash	-13.3%	6.0%	-19.2%

* Maximum allocations are prior to application of the volatility control mechanism.
** Month-end as of March 31, 2023. Previous month-end as of February 28, 2023. Weights are subject to adjustment based on daily volatility control.
The Index Live Date is July 1, 2015. All data prior to that are simulated.

Historical Monthly Index Returns*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full Year
2023	2.01%	-2.62%	1.59%										
2022	-3.04%	0.70%	-0.35%	-2.26%	-1.36%	-1.08%	0.39%	-2.72%	-3.10%	-0.15%	0.30%	-0.39%	-12.39%
2021	-0.04%	-0.19%	0.57%	2.55%	-0.07%	-0.13%	2.05%	1.13%	-2.92%	2.28%	-1.13%	1.49%	5.59%
2020	-0.41%	-2.47%	0.40%	0.33%	0.16%	0.30%	3.75%	0.05%	-1.33%	-0.86%	2.20%	2.09%	4.14%
2019	1.90%	-0.76%	1.77%	0.50%	-1.70%	2.24%	0.36%	3.00%	-1.38%	0.80%	-1.22%	1.97%	7.60%
2018	3.92%	-2.70%	-0.42%	-1.02%	-0.92%	0.70%	0.96%	2.08%	-0.81%	-5.25%	0.15%	2.44%	-1.18%
2017	1.23%	2.41%	1.07%	0.87%	0.85%	0.18%	1.32%	0.23%	-1.44%	1.29%	1.37%	0.93%	10.76%
2016	-0.73%	1.01%	0.31%	0.91%	-0.74%	2.76%	1.43%	-1.51%	0.85%	-1.21%	-0.90%	0.74%	2.86%
2015	*2.33%*	*-1.24%*	*-0.87%*	*0.41%*	*-0.19%*	*-1.41%*	-0.19%	-2.75%	0.43%	-0.47%	-1.76%	-0.48%	*-6.10%*
2014	*-1.48%*	*1.99%*	*-1.02%*	*1.16%*	*2.09%*	*1.20%*	*-0.41%*	*1.86%*	*-2.82%*	*0.47%*	*1.82%*	*-0.14%*	*4.67%*
2013	*-0.05%*	*-0.44%*	*1.59%*	*1.85%*	*-2.80%*	*-1.29%*	*1.47%*	*-1.93%*	*2.06%*	*1.24%*	*0.11%*	*0.58%*	*2.29%*
2012	*2.34%*	*0.62%*	*0.91%*	*0.30%*	*-1.81%*	*1.45%*	*2.13%*	*-0.26%*	*0.87%*	*-0.69%*	*0.27%*	*0.57%*	*6.82%*
2011	*0.85%*	*1.81%*	*-0.30%*	*3.35%*	*0.97%*	*-1.81%*	*3.08%*	*1.29%*	*-1.29%*	*0.13%*	*0.27%*	*1.40%*	*10.06%*
2010	*-0.66%*	*1.26%*	*2.06%*	*2.02%*	*-1.15%*	*1.51%*	*-0.01%*	*2.32%*	*2.86%*	*0.77%*	*0.04%*	*2.14%*	*13.89%*
2009	*-2.01%*	*-0.70%*	*0.81%*	*0.53%*	*2.29%*	*-0.17%*	*3.07%*	*0.50%*	*2.02%*	*-0.77%*	*3.25%*	*-2.04%*	*6.79%*
2008	*2.77%*	*2.21%*	*-0.97%*	*-1.21%*	*-0.51%*	*-3.27%*	*-0.99%*	*-1.57%*	*0.78%*	*-0.57%*	*2.62%*	*1.43%*	*0.54%*
2007	*0.26%*	*-0.65%*	*-0.55%*	*0.85%*	*-0.15%*	*-1.69%*	*0.26%*	*0.12%*	*1.64%*	*2.84%*	*0.36%*	*0.43%*	*3.69%*
2006	*2.70%*	*-0.16%*	*1.41%*	*1.16%*	*-1.62%*	*-1.24%*	*0.77%*	*1.40%*	*1.19%*	*2.22%*	*1.26%*	*0.19%*	*9.59%*
2005	*-2.16%*	*2.07%*	*-3.01%*	*-0.17%*	*0.58%*	*1.64%*	*1.61%*	*-0.98%*	*2.27%*	*-2.76%*	*1.89%*	*1.63%*	*2.41%*
2004	*0.47%*	*0.71%*	*0.54%*	*-5.87%*	*-0.29%*	*0.20%*	*-1.44%*	*3.37%*	*0.70%*	*2.33%*	*2.45%*	*1.24%*	*4.17%*
2003	*0.59%*	*-0.58%*	*-0.63%*	*2.22%*	*4.37%*	*0.12%*	*-0.88%*	*2.05%*	*0.93%*	*1.97%*	*2.38%*	*3.79%*	*17.41%*
2002	*1.10%*	*1.01%*	*3.18%*	*0.45%*	*0.95%*	*-2.15%*	*-2.13%*	*1.20%*	*2.14%*	*-1.01%*	*-0.34%*	*1.97%*	*6.39%*
2001	*0.86%*	*-1.34%*	*-1.00%*	*-2.23%*	*0.08%*	*1.33%*	*-0.90%*	*2.08%*	*-1.51%*	*2.37%*	*-2.12%*	*-0.22%*	*-2.70%*
2000	*-2.01%*	*-0.10%*	*0.43%*	*-1.55%*	*-1.14%*	*2.29%*	*1.44%*	*0.95%*	*-1.12%*	*-2.55%*	*1.70%*	*1.44%*	*-0.37%*
1999						*2.59%*	*-2.56%*	*-0.52%*	*-0.34%*	*0.26%*	*-0.53%*	*3.62%*	*2.42%*

Source: Morgan Stanley, Bloomberg.
* Data based on simulated returns from September 13, 2019 to June 30, 2015 and actual thereafter. Data through March 31, 2023.
Please see Notes on Simulated Returns.

Certain Key Risks

- The Index may not increase in value due to a number of factors.
- The volatility of the Index could be greater than the target volatility.
- The volatility target may also dampen the performance of the Index in rising markets.
- It is possible that the Index may be composed of a very small number of index components at any time.
- Products linked to the Index involve risks associated with emerging markets equities, currency exchange rates and precious metals.
- The Index has a limited performance history and past performance is no indication of future performance.
- The Index is calculated on an excess return basis and has embedded costs.
- Purchasers of products linked to the index will have no access to the assets underlying the Index.

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

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 between May 3, 1999 and June 30, 2015, prior to its actual existence. 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 provides no assurance 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. Actual results will vary, perhaps materially, from the simulated returns presented in this document. Calculation based on simulated performance is purely hypothetical and may not be an accurate or meaningful comparison. Past performance (actual or simulated) is not necessarily indicative of future results. The Index is calculated on an excess return basis over an equivalent cash investment, which means that the Index level reflects the deduction of the Federal Funds interest rate that would apply to such a cash investment. The Index also reinvests dividends.

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