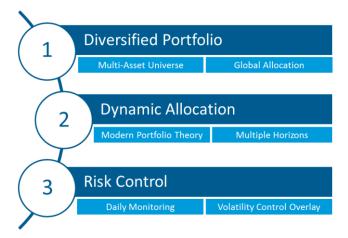
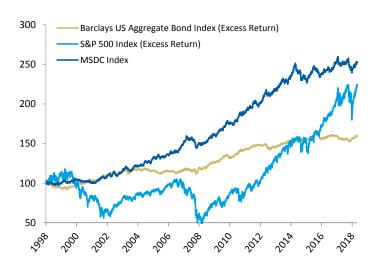


# **Index Philosophy**



### Index Performance\*



# **INDEX IDENTIFIER (TICKER):**

**MSUSMSDC** 

### **WEBSITE:**

morganstanley.com/indices/msdc

### **INDEX CALCULATION AGENT:**

Morgan Stanley & Co. LLC

### **INDEX LIVE DATE:**

April 30, 2019

### **NUMBER OF INDEX COMPONENTS:**

Maximum 9

### **REBALANCE FREQUENCY:**

Daily

### **VOLATILITY TARGET:**

5% Annualized

# **Trailing Index Performance\***

	MSDC Index	S&P 500 (Excess Return)	Barclays Aggregate Bond (Excess Return)
YTD Return	4.63%	17.22%	2.07%
1-Year Ann. Return	0.77%	10.67%	2.67%
3-Year Ann. Return	1.90%	12.97%	0.23%
5-Year Ann. Return	2.16%	10.36%	1.42%
10-Year Ann. Return	5.31%	14.46%	2.95%
10-Year Ann. Volatility	4.55%	15.22%	3.29%
10-Year Sharpe Ratio	1.17	0.95	0.90
Correlation to MSDC Index	100%	14%	35%

<sup>\*</sup> From December 31, 1998 to April 30, 2019. The Index came into existence on April 19, 2019. All data prior to that are simulated.

### **Index Construction**

The Morgan Stanley Dynamic Contribution Index offers diversified exposure to a wide range of asset classes representing global equities, government bonds and major commodities. 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 Portfolio -** The Index seeks to gain broad exposure to a diversified universe of asset classes representing global equities, government bonds and major commodities.



**Dynamic Allocation -** The Index uses modern portfolio theory principles to target the highest possible return for a given level of risk, rebalancing daily to account for changes in market conditions over both short-term and long-term horizons.

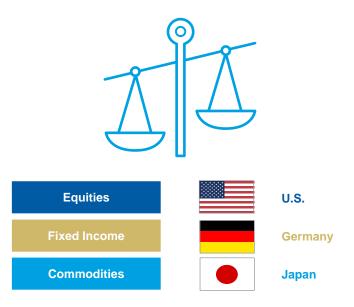


**Risk Control -** The Index attempts to reduce risk and smooth returns through daily monitoring and rebalancing, targeting an overall 5% volatility level.

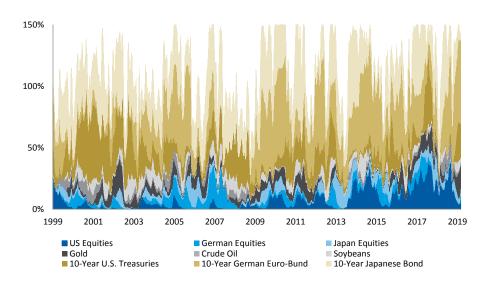
# **Index Components**

# German Equities German Government Bonds Japanese Equities Gold Gold Soybean Crude Oil

# **Broad & Diversified Investment Universe**



# Monthly Average Allocations by Asset Class\*



# **Monthly Allocations\***

		Average Allocations <sup>1</sup>	Monthly Average Allocations <sup>1</sup>	Cumulative Return Attributions <sup>2</sup>
Asset Class	Description	Full History	April 2019	April 2019
Equities				
	US Equities	8%	7%	0.26%
	German Equities	5%	11%	0.56%
	Japanese Equities	5%	4%	0.20%
Fixed Income				
	10-Year U.S. Treasuries	19%	35%	-0.12%
	10-Year German Euro-Bund	19%	68%	-0.41%
	10-Year Japanese Bond	31%	3%	-0.01%
Commodities				
	Crude Oil	3%	8%	0.40%
	Soybeans	5%	2%	-0.09%
	Gold	6%	11%	-0.11%

<sup>\*</sup> As of April 30, 2019. The Index came into existence on April 19, 2019. All data prior to that are simulated.

# **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 may dampen the performance of the Index and a different volatility estimation methodology may provide better risk management.
- 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 global equities markets, currency exchange rates, interest rates, commodities and precious metals.
- The Index has a limited performance history and past performance is no indication of future performance.
- The Index level is adjusted for costs associated with trading the underlying futures contracts, which will reduce returns on the Index.
- 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:**

Back-testing and other statistical analyses provided herein use simulated analysis and hypothetical circumstances to estimate how the Index may have performed between December 31, 1998 and April 19, 2019, 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. 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

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<sup>&</sup>lt;sup>1</sup> Computed as the average of the daily allocations over the corresponding month.

<sup>&</sup>lt;sup>2</sup>The sum of the index components' return attribution is not equal to the Index return over that month due to the servicing fee and return compounding effects.

# **Monthly Returns\***

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Full Year
2019	2.87%	-0.39%	1.54%	0.56%									
2018	1.61%	-2.22%	-0.69%	0.51%	0.42%	0.15%	-0.14%	1.71%	-0.01%	-3.20%	-0.89%	-1.70%	-4.48%
2017	-0.09%	2.50%	-0.68%	0.70%	0.50%	-1.30%	0.56%	0.56%	-0.09%	1.89%	1.48%	0.17%	6.29%
2016	0.31%	1.50%	0.48%	0.84%	0.87%	3.12%	-1.20%	-1.56%	0.48%	-1.96%	-1.15%	1.11%	2.77%
2015	1.61%	2.01%	1.47%	-1.54%	-0.30%	-1.55%	0.51%	-3.91%	-0.19%	1.90%	-0.09%	-1.61%	-1.85%
2014	-0.31%	2.06%	0.49%	1.42%	1.44%	-0.21%	-1.34%	2.08%	-0.89%	0.67%	1.50%	0.57%	7.68%
2013	0.45%	1.47%	2.12%	2.01%	-0.89%	-0.47%	-0.14%	-0.52%	1.45%	1.05%	1.79%	-0.31%	8.22%
2012	1.68%	1.08%	0.27%	1.34%	-0.63%	0.14%	2.80%	1.13%	-1.43%	-1.21%	0.20%	1.30%	6.79%
2011	-0.73%	0.15%	-0.31%	2.16%	0.41%	-1.19%	3.29%	2.28%	-1.17%	1.10%	-0.15%	1.04%	6.97%
2010	-0.31%	1.27%	1.65%	1.71%	-0.07%	1.01%	0.06%	2.39%	1.10%	0.97%	-0.12%	0.59%	10.70%
2009	-1.37%	0.17%	1.03%	-0.16%	0.41%	1.42%	1.65%	0.93%	0.79%	-0.75%	3.14%	-1.37%	5.95%
2008	1.09%	4.24%	-1.97%	-1.03%	0.24%	1.41%	-1.36%	-0.01%	-3.25%	-3.52%	2.66%	1.62%	-0.19%
2007	0.81%	1.40%	-0.70%	0.59%	1.53%	-0.47%	-0.54%	0.92%	2.13%	1.83%	0.76%	2.31%	11.04%
2006	1.29%	-0.98%	0.76%	1.35%	-1.23%	-0.38%	0.38%	0.79%	-0.51%	0.73%	1.40%	-0.29%	3.32%
2005	0.62%	-0.08%	1.12%	-1.05%	2.70%	0.98%	0.38%	0.06%	0.75%	-2.19%	3.25%	1.89%	8.63%
2004	0.83%	2.22%	0.87%	-1.26%	-2.20%	0.04%	0.22%	1.37%	1.96%	1.10%	0.44%	-0.77%	4.86%
2003	1.14%	0.90%	-2.30%	1.17%	2.44%	-0.81%	-2.54%	1.21%	1.14%	1.72%	-0.65%	2.45%	5.88%
2002	0.21%	1.28%	-0.29%	1.47%	2.06%	-0.50%	1.50%	1.28%	1.50%	-1.21%	-0.67%	2.40%	9.32%
2001	0.01%	-0.15%	-1.19%	-0.30%	-0.26%	-0.51%	1.10%	-0.30%	-0.17%	1.06%	-2.03%	-1.19%	-3.91%
2000	-0.17%	1.47%	0.79%	-2.39%	-0.55%	1.62%	-1.65%	2.99%	-0.93%	0.85%	2.33%	-1.39%	2.85%
1999	1.55%	-2.85%	0.86%	2.03%	-2.11%	-0.81%	-0.22%	0.16%	1.79%	-2.52%	0.82%	2.63%	1.14%

<sup>\*</sup>Please see Notes on Simulated Returns.

Source: Morgan Stanley, Bloomberg.

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<sup>&</sup>lt;sup>1</sup> Data through April 30, 2019.