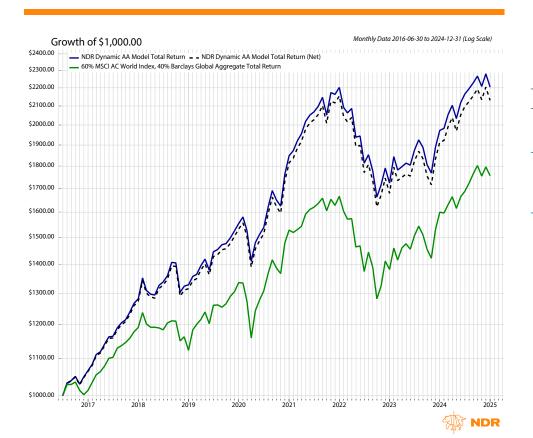


# NDR Dynamic Allocation Strategy

## **Strategy Description:**

The NDR Dynamic Allocation strategy trades 13 highly-liquid ETFs based on an objective, weight-of-the-evidence model designed to minimize drawdowns. The model portfolio can make allocations to six equity ETFs, six fixed income ETFs, as well as a cash ETF. First, the top-level macroeconomic model determines the appropriate allocation to equity and fixed income. Then, within the equity and fixed income sleeves, independent indicator models determine the ETF allocations. Each indicator within the equity and fixed income sub-models has an equal vote that contributes to its relative position and weight within the sleeve. The tactical weight recommendations are unconstrained at both levels, although extreme values are infrequent. The underlying alpha model was launched in our ETF Strategy service on October 26, 2012. The Dynamic Allocation strategy combines the original alpha model in a monthly rebalancing system with a trade reducing overlay and was launched on July 1, 2016. The official composite account commenced on September 1.2017.

The strategy's benchmark: 60% MSCI ACWI Total Return Index and 40% Bloomberg Barclays Global Aggregate Total Return Index in U.S. Dollars.



### **Strategy Strengths:**

- 1. Designed to minimize drawdowns
- 2. Ability to move to cash in bearish environments
- 3. Two-tiered approach, gauging macro risk as well as ETF-specific tactical allocation
- 4. Overall alpha model implemented for NDR ETF research strategy product in 2012

#### **Performance Summary**

	Gross (%)	Net of 0.4% Per Annum (%)	Benchmark (%)
Real-Time			
YTD Monthly (12/29/2023-12/31/2024)	11.62	11.18	9.70
1-mo Rolling (11/29/2024-12/31/2024)	-3.34	-3.34	-2.26
3-mo Rolling (09/30/2024-12/31/2024)	-2.77	-2.87	-2.58
1-yr Rolling (12/29/2023-12/31/2024)	11.62	11.18	9.70
1-yr Calendar (12/29/2023-12/31/2024)	11.62	11.18	9.70
3-yr Rolling (12/31/2021-12/31/2024)	0.03	-0.37	1.76
5-yr Rolling (12/31/2019-12/31/2024)	7.23	6.80	5.61
Since Inception (08/31/2017-12/31/2024)	8.57	8.14	6.10
Backtest			
10-yr Rolling (12/31/2014-12/31/2024)	8.35	7.92	6.03

#### RISK STATISTICS (08/31/2017-12/31/2024)

	Gross (%)	Net of 0.4% Per Annum (%)	Benchmark (%)
Standard Deviation	11.59	11.58	11.46
Downside Deviation	7.65	7.70	7.52
Sharpe Ratio	0.54	0.50	0.33
Beta (Relative to Benchmark)	0.94	0.94	1.00
Upside Capture	105.20	103.67	100.00
Downside Capture	89.61	90.62	100.00
Max Drawdown	-24.48 (12/31/2021- 09/30/2022)	-24.70 (12/31/2021- 09/30/2022)	-23.09 (12/31/2021- 09/30/2022)



# NDR Dynamic Allocation Strategy

# **Definitions:**

- Annualized Return: the rate of return which, compounded annually over a certain period of time, would produce a strategy's total return over that same period.
- Standard Deviation: A statistical measurement of dispersion about an average, which depicts how widely returns varied over a certain period of time. When a strategy has a high standard deviation, the predicted range of performance is wide, implying greater volatility.
- Downside Deviation: A statistical measurement of dispersion focused on downside risk. It is similar to standard deviation, but only uses negative returns.
- Sharpe Ratio: A risk-adjusted performance measure for a unit of risk. It is calculated by dividing the difference between a strategy's return and the risk-free rate (excess returns), by the standard deviation of the strategy's return.
- Beta: A relative measure of a strategy's risk against the benchmark. A beta greater than one means the strategy is theoretically more volatile than the benchmark, a beta of one indicates that the strategy moves with the benchmark, and a beta less than one implies that the strategy theoretically is less volatile than the benchmark.
- Upside Capture: measures whether the strategy has outperformed the benchmark during periods of benchmark strength. The ratio takes the strategy's monthly return during months when the benchmark had a positive return and divides it by the benchmark return during that same month. An upside capture ratio over 100 indicates that a strategy has generally outperformed the benchmark during periods of positive returns for the benchmark.
- Downside Capture: measures whether the strategy has outperformed the benchmark during periods of benchmark weakness. The ratio is calculated by taking the strategy's monthly return during the periods of negative benchmark performance and divides it by the benchmark return. A downside capture ratio of less than 100 indicates that a strategy has lost less than its benchmark in periods when the benchmark has been weak.
- Maximum Drawdown: The largest peak to trough decline during a specific record period of a strategy. It is usually quoted as the percentage between the peak to the trough.
- Log Scale: A logarithmic (log) scale shows two equivalent percentage changes in the plotted series by the same distance on the vertical axis.

  A logarithmic price scales tend to show less severe increases or decreases in a series than an arithmetic price scale.
- Benchmark: A benchmark is a standard against which the performance of the strategy is being measured. For the Dynamic Allocation Strategy, the benchmark is 60% MSCI All Country World Index Total Return Index (equities) and 40% Bloomberg Barclays Global Aggregate Total Return Index (fixed income) in U.S. Dollars.



# NDR Dynamic Allocation Strategy

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