

# The Swan Defined Risk Strategy - A Full Market Solution

Absolute, Relative, and Risk-Adjusted Performance Metrics for the Swan Defined Risk

U.S. Large Cap Composite, S&P 500 Index, and HFRI Index.

(Summary)

December31, 2024

## Manager Performance

July 1997 - December 2024 (Single Computation)



Multi-Statistic (Custom Table) July 1997 - December 2024: Summary Statistics

	•					
	Return	Cumulative Return	Standard Deviation (Population)	Beta vs. Market	Excess Return vs. Market	Sharpe Ratio
DRS U.S. Large Cap Composite (net)	7.54%	638.70%	9.05%	0.34	-1.57%	0.60
HFRI Fund Weighted Composite Index	6.44%	456.83%	6.76%	0.34	-2.67%	0.64
S&P 500	9.11%	999.27%	15.51%	1.00	0.00%	0.45

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# Manager vs Benchmark: Return

July 1997 - December 2024 (not annualized if less than 1 year)



Manager	VS	Benchmar	k:	Return	
	_				

July 1997 - December 2024 (not annualized if less than 1 year)

	1 year	3 years	5 years	10 years	15 years	20 years	Analysis Period
DRS U.S. Large Cap Composite (net)	14.01%	4.35%	6.15%	5.47%	5.66%	6.63%	7.54%
HFRI Fund Weighted Composite Index	10.01%	4.47%	7.03%	5.28%	5.03%	5.19%	6.44%
S&P 500	25.02%	8.94%	14.53%	13.10%	13.88%	10.35%	9.11%

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# Calendar Year Return

As of December 2024



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#### Risk / Return

July 1997 - December 2024 (Single Computation)



	Return (%)	Std Dev (Pop.) (%)	Downside Risk (%)	Beta vs. Market	Alpha vs. Market	R-Squared vs. Market (%)	Sharpe Ratio
DRS U.S. Large Cap Composite (net)	7.54	9.05	6.83	0.3400	4.41	33.90	0.5958
HFRI Fund Weighted Composite Index	6.44	6.76	5.06	0.3399	3.15	60.75	0.6355
S&P 500	9.11	15.51	11.77	1.0000	0.00	100.00	0.4488

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Return / Time







Return / Time July 1997 - December 2024 (120-Month Moving Windows, Computed Monthly)





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# Upside / Downside (Quarterly)

July 1997 - December 2024 (Single Computation)



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	Up	Down	Up Market	Down Market	Best	Worst	Best	Worst	Up Capture	Down Capture	R-Squared
DRS U.S. Large Cap Composite (net)	81	29	3.44	-1.86	16.87	-13.23	33.36	-10.98	48.8	26.8	34.09
HFRI Fund Weighted Composite Index	81	29	3.27	-2.44	14.91	-11.55	36.06	-19.03	46.4	33.4	68.27
S&P 500	79	31	6.70	-8.00	21.30	-21.94	56.35	-38.09	100.0	100.0	100.00

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	Max Drawdown	Max Drawdown Begin Date	Max Drawdown End Date	Max Drawdown Length	Max Drawdown Recovery Date	Max Drawdown Recovery Length	Longest Drawdown	Longest Drawdown Begin Date	Longest Drawdown End Date	Longest Drawdown Length	Longest Drawdown Recovery Date	Longest Drawdown Recovery Length	Pain Index	Pain Ratio
DRS U.S. Large Cap Composite (net)	-18.60%	Jul 1998	Aug 1998	2	Jan 1999	5	-11.32%	Jan 2022	Sep 2022	9	Jan 2024	16	2.48%	2.18
HFRI Fund Weighted Composite Index	-21.42%	Nov 2007	Feb 2009	16	Oct 2010	20	-21.42%	Nov 2007	Feb 2009	16	Oct 2010	20	2.40%	1.79
S&P 500	-50.95%	Nov 2007	Feb 2009	16	Mar 2012	37	-44.73%	Sep 2000	Sep 2002	25	Oct 2006	49	9.70%	0.72

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#### Market Cycles Defined

#### March 2009 - present: "New Heights"

Massive government intervention in the form of government guarantees and monetary and fiscal stimulus trigger a sharp rally. Much of the market losses are regained, although investors still bear the psychological scars of the Credit Crisis. The economic performance of many countries badly lags capital market performance.

#### August 2007 - February 2009: "Credit Crisis"

Years of cheap money, excess liquidity, overborrowing, and sloppy securitizations come to a head and plunge the markets in to their worst period since the Great Depression. The financial landscape is changed in ways previously unimaginable and trillions of dollars of wealth disappear.

#### April 2003 - July 2007: "Easy Money Recovery"

Following the quick resolution to the first stage of the Iraq War, markets finally shake off the long bear market following the dot-com bust. Massive amounts of liquidity and the housing boom propel equity markets to all-time highs.

#### April 2000 - March 2003: "Dot-Com Bust"

The dot-com mania comes crashing down, as basics like sustainable business models, actual earnings, and cash flow start to matter again. The receding tide reveals shady accounting practices across companies in the broader economy, and the September 11<sup>th</sup> terrorist attacks send the markets in to a three-year bear period.

Alpha	What Is It? Alpha measures the risk-adjusted added value an active manager adds above and beyond the passive benchmark.	What Is Considered Good? Alphas should be positive. A negative alpha suggests the manager failed to add value over the benchmark on a risk-adjusted basis.
Beta	Beta measures the sensitivity of the manager to movements in an underlying benchmark.	Conservative investors prefer a beta less than 1.0, suggesting the investment moves less than the market. Aggressive investors prefer a beta greater than 1.0, which are more sensitive to market movements.
Down	Down capture measures the percentage of market losses endured by	Down capture should be less than 100%, meaning a manager
Capture	a manager when markets are down.	experiences less than the full market downswing.
Downside	Downside deviation is a risk statistic measuring volatility. It is a	Generally, the lower the better. A manager's downside deviation should
Deviation	variation of standard deviation that focuses only upon the "bad" volatility.	be lower than index or lower than universe's average.
Excess	The simplest of the benchmark-relative statistics, excess return	One would want the excess return to be positive, indicating the manager
Return	measures the difference between the manager return and the benchmark return.	outperformed its benchmark.
Information	A benchmark relative return-versus-risk metric, the information ratio	Information ratios should be positive. A good information ratio is
Ratio	measures the excess return against the benchmark divided by	typically in the 0.40-0.60 range; it is rare to see active managers with
	tracking error, where tracking error is a measure of consistency.	information ratios greater than 1.00.
Kurtosis	Kurtosis identifies where the volatility risk came from in a distribution	Generally investors like to see kurtosis numbers close to zero or even
	of returns. Kurtosis improves one's understanding of volatility risk.	negative. The larger the kurtosis, the more of an investment's risk lies in the tails of the distribution.
Maximum Drawdown	A risk metric indicating capital preservation, the maximum drawdown measures the peak-to-trough loss of an investment.	The smaller the maximum drawdown the better. A maximum drawdown of 0% indicates an investment never lost money. One should keep in mind the type of investment and the time period analyzed to understand if a maximum drawdown is reasonable.
Pain Index	A proprietary risk metric, the pain index quantifies the capital	The lower the pain index the better. A pain index of 0% indicates the
	preservation tendencies of a manager or index. It measures the	investment has never lost value. A pain index should be compared
	depth, duration, and frequency of periods of losses.	against a benchmark or peer group in order to understand context.
Pain Ratio	A proprietary return-versus-risk trade-off metric, the pain ratio compares the added value over the risk-free rate against the depth,	The higher the pain ratio the better. A high pain ratio indicates 1) a high risk premium over the risk free rate, 2) very little losses, or 3) a
	duration, and frequency of losses.	combination of both. One should compare an investment's pain ratio to a benchmark or universe.
R-Squared	R-squared represents the "goodness of fit" of a manager to its	An investor who believes it is difficult for active managers to outperform
	benchmark. R-squared is the percentage of variation in a manager's returns explained by the benchmark's returns.	a passive benchmark would likely prefer a high r-squared. Alternatively an investor who believes in active management would prefer a lower r- squared.
Sharpe Ratio	The most famous return-versus-risk measurement, the Sharpe ratio	Generally, the higher the better. A manager's Sharpe ratio should be
1	represents the added value over the risk-free rate per unit of volatility risk.	higher than index or higher than a universe average.
Skewness	Skewness measures to what direction and degree a set of returns is	Generally speaking investors prefer a positive skewness rather than a
	tilted or "skewed" by its extreme outlier occurrences.	negative skewness. However, in the real world it is difficult to find
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investment with a positive skew.

Sortino Ratio	• A variation of the Sharpe ratio, the Sortino ratio is a	The larger the Sortino ratio the better. One must compare a manager's
	return-versus-risk trade-off metric that uses downside deviation as its measure of risk.	Sortino ratio to an index or peer group in order to understand whether or not a Sortino ratio is good or bad. It is also useful to keep in mind the time period being analyzed.
Standard Deviation	Standard deviation measures how closely returns track their long term average. Standard deviation measures volatility risk.	Generally, the lower the better. A manager's standard deviation should be lower than index or lower than universe's average.
Up Capture	Up capture measures the percentage of market gains captured by a manager when markets are up.	Ideally up capture will be greater than 100%, meaning the manager does better than the market when markets are up. The larger the up capture the better.

Compliance Statement: Swan Global Investments, LLC ("Swan") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Swan has been independently verified by The Spaulding Group for the periods July 1, 1997 through December 31, 2023. The verification report is available upon request.

A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. To receive copies please call 970-382-8901 or email operations@swanglobalinvestments.com.

Definition of the Firm: Swan Global Investments, LLC is an SEC registered investment advisor providing asset management services utilizing the Swan Defined Risk Strategy ("DRS"), allowing its clients to grow wealth while protecting capital. Please note that registration of the adviser does not imply a certain level of skill or training. Swan Global Investments, LLC is affiliated with Swan Capital Management, LLC, Swan Global Management, LLC and Swan Wealth Management, LLC. Firm Redefinition: Previously Swan offered and managed The Defined Risk Strategy for its clients which were individual investors. Swan redefined itself to include all client types, including individuals, institutions and sub-advised clients, as of January 1, 2010. This redefinition resulted in a change to Swan's 2009 performance numbers, due to adding all sub-advised clients beginning on June 30, 2009. Additionally, Swan created affiliated entity Swan Capital Management, Inc. on April 13, 2012 to be an advisor and distributor of the Swan Defined Risk Fund launched in July 2012. In December 2014, Swan Capital Management, Inc. converted to Swan Capital Management, LLC. Swan created affiliated entity Swan Capital Management, LLC. Swan Created affiliated entity Swan Global Management, LLC to serve as the portfolio manager of the DRS in 2014, and subsequently created affiliated entity Swan Global Management, LLC to serve as the portfolio manager of the DRS in 2014, and subsequently created affiliated entity Swan Global Management, LLC to serve as the portfolio manager of the DRS tarting in 2015. Name Changes: Swan Consulting, Inc. changed its name to Swan Wealth Advisors, Inc. on April 8, 2011 to better reflect that the Company is a money management firm rather than an advisor. Advisors are the Company's clients, and it does not want to give the impression that the Company is a competing with other advisors. Instead, Swan Global Investments, LLC offers investment products and manages money for sub-advised clients and the mutual funds of its affili

Composite Inception Date: The inception of the DRS U.S. Large Cap Composite was July 1, 1997.

Composite Creation Date: The DRS U.S. Large Cap Composite was defined on January 1, 2010.

Composite Description: The DRS U.S. Large Cap Composite demonstrates the performance of qualified and non-qualified assets invested in DRS U.S. Large Cap strategies managed by Swan Global Investments, LLC since inception. It includes discretionary individual accounts whose account holders seek the upside potential of owning stock, and the desire to minimize the downside risk associated with owning stock. The Composite relies on LEAPS and other options to manage this risk. Individual accounts own S&P 500 exchange traded funds and LEAPS associated with the exchange traded funds as well as multiple other option trades that represent other indices that are widely traded. The Defined Risk Strategy was designed to protect investors from substantial market declines, provide income in flat or choppy markets, and to benefit from market appreciation. Stock and options are the primary components of the strategy.

Returns: Performance results reflect the reinvestment of dividend and other earnings and are expressed in U.S. dollars. Gross-of-fee performance results do not reflect the deduction of the firm's investment management fees or custodial fees but are net of all transaction costs and withholding taxes (if applicable). Netof-fees returns are calculated by deducting the higher of either actual management fees or a model management fee equal to the highest tier of the fee schedule (0.60% annual, or 0.05% monthly) from the monthly gross-of-fee composite return. The composite includes portfolios that pay zero commissions on certain securities in the portfolio (e.g., exchange traded funds (ETFs)).

Fee Schedule: The investment management fee schedule for sub-advised clients is as follows. Rate breaks are applied to total aggregate assets under management under the sub-advisory agreement:

Annual fees are 60 basis points (0.60%) on the first \$10 Million; 50 basis points (0.50%) on the next \$190 Million; 45 basis points (0.45%) on the next \$300 Million; 40 basis points (0.40%) on the next \$500 Million; and 35 basis points (0.35%) over \$1 Billion. Actual investment management fees incurred by clients may vary.

Benchmark: The benchmark used for The DRS U.S. Large Cap Composite is the S&P 500 Index, which consists of approximately 500 large cap stocks.

Policies: Policies for valuing investments, calculating performance, and preparing GIPS reports, as well as a complete list and description of composites and broad distribution pooled funds are all available upon request.

Use of Derivatives: The purchase and sale of options are a component of The Defined Risk Strategy Composite. Options are traded on both long-term and short-term horizons to reduce the risk of owning stock and to generate income. Since inception of The Defined Risk Strategy, options have been responsible for

a significant portion of total returns. The DRS uses little or no leverage (<2% of total portfolio value). Portfolios are generally balanced annually with approximately 85-90% stock, 10-15% options. Please contact Swan Global Investments, LLC if you would like more detailed information on the use of options in The DRS.

Leverage and Short Positions: The DRS U.S. Large Cap Composite uses a combination of ETFs (long) and options, both long (portfolio has bought a position in a call or put option) and short (the portfolio holds a written call or put option) positions which constitute approximately 85-90% and 10-15% of the portfolio, respectively. The Defined Risk Strategy does not typically borrow money to buy stock on margin and as a result does not use leverage in the traditional sense. However, the DRS uses options as a material part of the strategy and by definition may constitute use of leverage since options typically control a large amount of the underlying security. This does not imply that The DRS portfolio is leveraged. The short option positions that are used to generate income are offset in whole or in part by the long stock and long options positions contained in the portfolio. Regardless, a margin account could be required.

Minimum account size: Prior to January 1, 2013, there was no minimum account size required for inclusion in Defined Risk Strategy Composite. Starting January 1, 2013, the minimum account size required for inclusion in the DRS U.S. Large Cap Composite is \$250,000.

Beta: Beta for the Composites has been calculated using the standard formula of: covariance of portfolio and benchmark returns divided by the variance in benchmark returns. The period used in calculations is July 1, 1997 through the end of the period and the frequency of returns used is monthly. Beta is based on returns that are net of Swan fees only. A beta greater than 1.0 indicates that the investment is more volatile than the index, whereas a beta between 0 and 1.0 indicates that the investment is less volatile than the market index. A negative beta indicates the investment performance is counter-cyclical to the market. Values are excluded for the first 3.5 years of Composite implementation (i.e., 1997-2000) to ensure sufficient measurement points for meaningful statistical analysis.

Standard Deviation (External): Standard deviation measures the variability of the Composite's monthly returns, and states that variability on an annualized basis. Annualized standard deviations of monthly returns for both the Composite and benchmark have been calculated using the following method: Standard Deviation of 36 monthly returns multiplied by the Square Root of 12 (which annualizes it). This measure is based on returns that are net of Swan fees only.

Measure of Dispersion (Internal Standard Deviation): The Composite dispersion is measured using standard deviation of returns as stated above. However, from inception to December 31, 2012, the dispersion represented the variability of Net-of-Fees returns within the Composite. After December 31, 2012, the dispersion represents the variability of Gross-of-Fees returns within the Composite to remove the variance in fees per account. Dispersion is measured using only portfolios that were included in the Composite the entire calendar year.

Sharpe Ratio: Sharpe Ratios for both the Composite and the benchmark have been calculated using the standard formula of (Annualized Return – Risk Free Annualized) / Standard Deviation. The period used in calculations is July 1, 1997 through the end of the period and the frequency of returns used is annually. Annualized Returns in this calculation are net of Swan fees only. Risk Free Return values used in calculations are based on 91 Day Treasury Bill returns for the same period. Values are excluded for the first 3.5 years of Composite implementation (i.e., 1997-2000) to ensure sufficient measurement points for meaningful statistical analysis.

Currency: All valuations are computed, and performance reported in US dollars. Past results do not guarantee future performance.

Portfolios in the composite may include non-DRS securities (securities that are not part of the Swan Defined Risk Strategy) that are excluded from composite performance.

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Additional benchmarks that might be used in this report are: The Barclays US Aggregate Bond Index, which is a broad based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency) issues.

The 60/40 blended composite, weighted 60% in the aforementioned S&P 500 Index and 40% in the Barclays US Aggregate Bond Index. The 60/40 is rebalanced monthly.

The HFRI Fund Weighted Composite Index, which is a global, equal-weighted index of over 2,000 single-manager funds that report to the HFR database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

All Swan products utilize the Defined Risk Strategy (DRS), but may vary by asset class, regulatory offering type, etc. Accordingly, all Swan DRS product offerings will have different performance results due to offering differences and comparing results among the Swan products and composites may be of limited use.

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There is no guarantee any investment or the DRS will meet its objectives. All investments involve the risk of potential investment losses as well as the potential for investment gains. Prior performance is not a guarantee of future results and there can be no assurance, and investors should not assume, that future performance will be comparable to past performance. Further information is available upon request by contacting the company directly at 970-382-8901 or www.swanglobalinvestments.com. 012-SGI-011725

	Swan Global Investments, LLC DRS U.S. Large Cap Strategy Composite										S&P 500 ("The Benchmark")						
Year	Net-Of- Fee Return	Net-Of- Fee Cumulat ive Return	Net-Of- Fee Annuali zed Return	Gross- Of-Fee Return	Gross- Of-Fee Cumulat ive Return	Gross- Of-Fee Annuali zed Return	Beta (Net-Of- Fee)	Standar d Deviatio n (Net- Of-Fee)	Sharpe Ratio (Net-Of- Fee)	# of Accts / Assets (\$MM)	Total Firm Assets (\$MM)	Dispersi on (Internal ) (Gross- Of-Fee)	Return	Cumulat ive Return	Annuali zed Return	Standar d Deviatio n (Extern al)	Sharpe Ratio
2014	6.11%	333.67%	8.74%	6.74%	416.60%	9.84%	0.28	4.75%	0.65	599 / 434.3	1,810.04	0.65%	13.69%	220.92%	6.89%	8.97%	0.29
2015	-2.23%	323.99%	8.12%	-1.64%	408.14%	9.18%	0.29	5.79%	0.61	766 / 473.21	2,446.11	1.36%	1.38%	225.36%	6.58%	10.47%	0.28
2016	8.90%	361.71%	8.16%	9.55%	456.68%	9.20%	0.29	5.38%	0.64	1,207 / 675.64	3,620.08	0.90%	11.96%	264.27%	6.85%	10.59%	0.31
2017	11.29%	413.84%	8.31%	11.96%	523.26%	9.34%	0.29	4.98%	0.67	1,630 / 982.45	4,975.33	0.78%	21.83%	343.79%	7.54%	9.92%	0.37
2018	-7.01%	377.83%	7.55%	-6.45%	483.07%	8.55%	0.31	6.23%	0.59	1,292 / 756.36	4,063.88	1.13%	-4.38%	324.34%	6.95%	10.80%	0.33
2019	14.69%	448.01%	7.85%	15.38%	572.73%	8.84%	0.31	7.01%	0.63	1,144 / 638.36	3,065.24	1.15%	31.49%	457.95%	7.94%	11.93%	0.40
2020	2.82%	463.45%	7.63%	3.44%	595.85%	8.61%	0.32	9.17%	0.61	893 / 501.09	2,236.86	1.75%	18.40%	560.60%	8.37%	18.53%	0.41
2021	15.38%	550.10%	7.94%	16.07%	707.68%	8.90%	0.33	8.07%	0.66	1,026 / 546.44	2,571.77	0.24%	28.71%	750.23%	9.13%	17.17%	0.47
2022	-10.98%	478.71%	7.13%	-10.45%	623.32%	8.07%	0.33	8.76%	0.57	818 / 414.59	2,202.24	0.40%	-18.11%	596.25%	7.91%	20.87%	0.38
2023	11.96%	547.94%	7.31%	12.64%	714.72%	8.24%	0.33	7.68%	0.58	736 / 403.99	2,105.95	0.42%	26.29%	779.27%	8.55%	17.29%	0.42