



S-Network Large-Cap Sharpe Ratio Index

Q4 2017

Index Rationale

- ❑ **The Sharpe Ratio is a Key Measure of Financial Performance**
- ❑ **The Sharpe Ratio is Widely Used by Financial Professionals**
- ❑ **The Sharpe Ratio is Used to Identify Return Per Unit of Risk**
- ❑ **The S-Network Sharpe Ratio Index Uses the Sharpe Ratio to Assemble a Portfolio of Stocks:**

That Have Shown Superior Performance Relative to Risk

A small sailboat with two people on deck is sailing on a calm body of water under a clear sky. The boat is positioned in the lower-left corner of the slide.

The S-Network Large Cap Sharpe Ratio Index Offers a Pure Play, Rules-Based Index.

Index Characteristics

❑ Well-Established Universe of Index Candidates

- S&P 500 Serves as Universe for SHRPX
- SHRPX Comprises up to 50 Constituents
- Stocks Must Meet All Screens Needed to Qualify for the Leading Large-Cap US Equity Benchmark Index

❑ Diversified by Sector

- Five Stocks with the Highest Sharpe Ratios in Each of the Ten Sectors Comprising the S&P 500 (Real Estate and Financials Combined) are Selected for Inclusion in SHRPX, Assuring Diversification Across All Sectors

❑ Entirely Rules-Based

- Depends on a Clearly Defined Rules-Based Methodology
- No Discretion is Exercised in Compiling the Index
- Pre-Defined Screening Protocol Assures a Consistent, Transparent and Arms-Length Compilation Process



The S-Network Large Cap Sharpe Ratio Index Offers a Pure Play, Rules-Based Index.

Unexploited ETF Opportunity With Stellar Performance

❑ **Concept Can Be Conveyed in Short “Elevator” Pitch**

- Sharpe Ratio Well Understood by Market Participants
- Methodology Mirrors Methodology of SDOGX

❑ **Sharpe Ratio Index (SHRPX) Provides First Mover Advantage**

- Concept Not Introduced in US Market
- Best of Both Worlds: Combines Price Performance with Low Volatility

❑ **Performance Can Be Stated in 3 Simple Sentences**

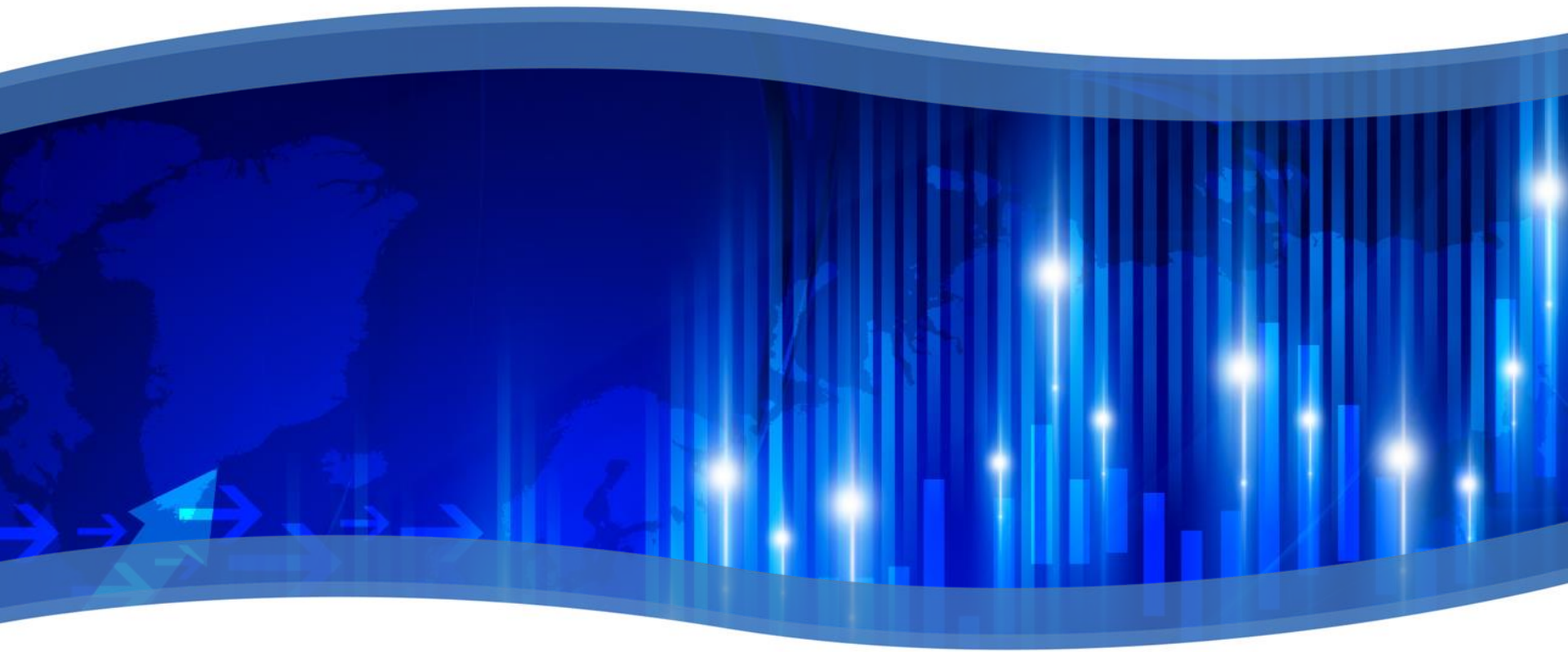
- SHRPX Outperforms S&P 500 in 13 of 17 Years
- SHRPX Average Outperformance = 9.0%
- SHRPX Average Underperformance = -2.0%

❑ **Outperforms Market in 47 Out of 71 Quarters (66%)**

❑ **Outperforms Market in 126 Out of 213 Months (59%)**



In an increasingly Crowded ETF Market, SHRPX Offers First Mover Advantage Backed by an Academically Rigorous Driver and Outstanding Performance



Index Performance

Historical Performance

**S-Network Sharpe Ratio TR Index vs. S-Network US Large-Cap 500 TR Index
(12/31/1999–12/31/2017)**



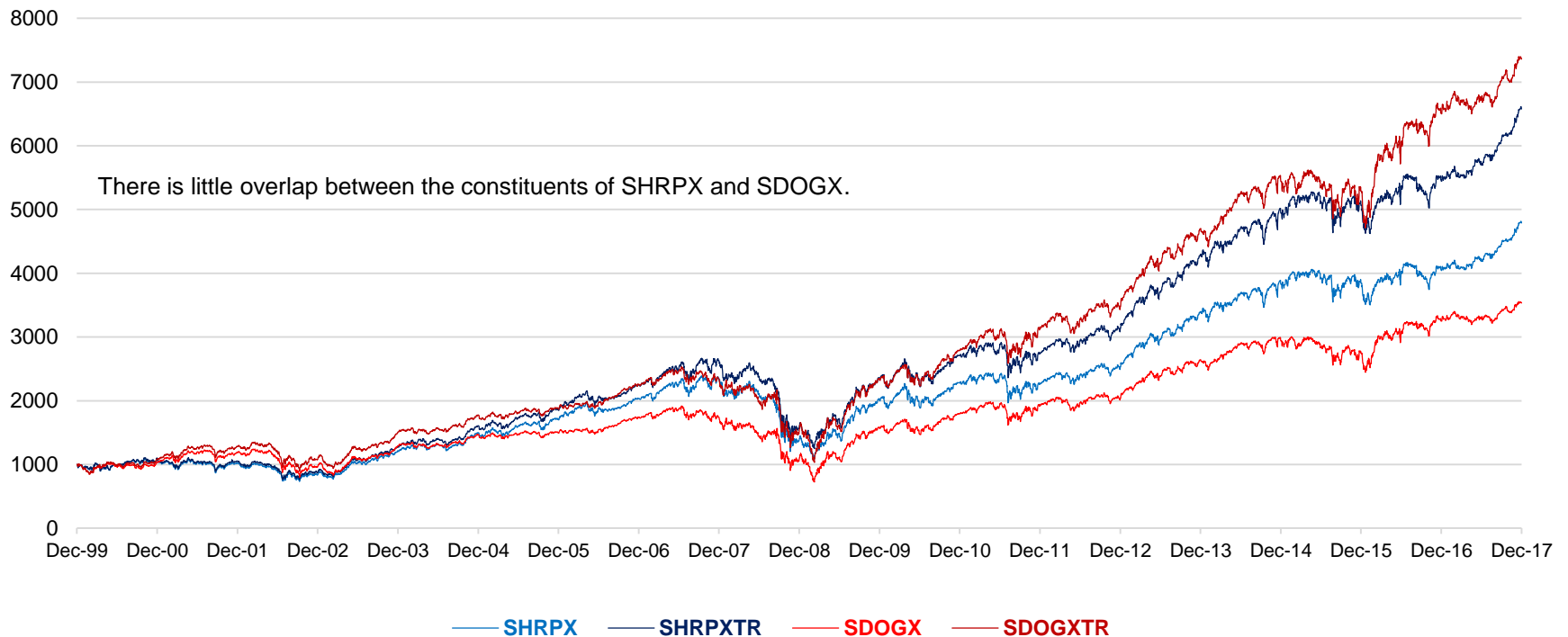
*To ensure fair comparisons, all of the starting index values are normalized to 1,000 as of December 31, 1999.

Source: S-Network, as of 12/31/2017

**The S-Network Large Cap Sharpe Ratio Index Offers Consistent Performance Over Time,
Regularly Outperforming the SN500 and Other High Dividend Indexes.**

SHRPX vs. SDOGX

S-Network Sector Dividend Dogs Index vs. S-Network Large-Cap Sharpe Ratio Index
(12/31/1999–12/31/2017)



*To ensure fair comparisons, all of the starting index values are normalized to 1,000 as of December 31, 1999.

Source: S-Network, as of 12/31/2017

The Total Return Performance of SHRPX is Comparable to that of SDOGX, but SHRPX Derives Substantially More of Its Performance from ETF-Friendly Capital Gains Rather than Dividends.



Index Constituents & Fundamentals

Index Constituents

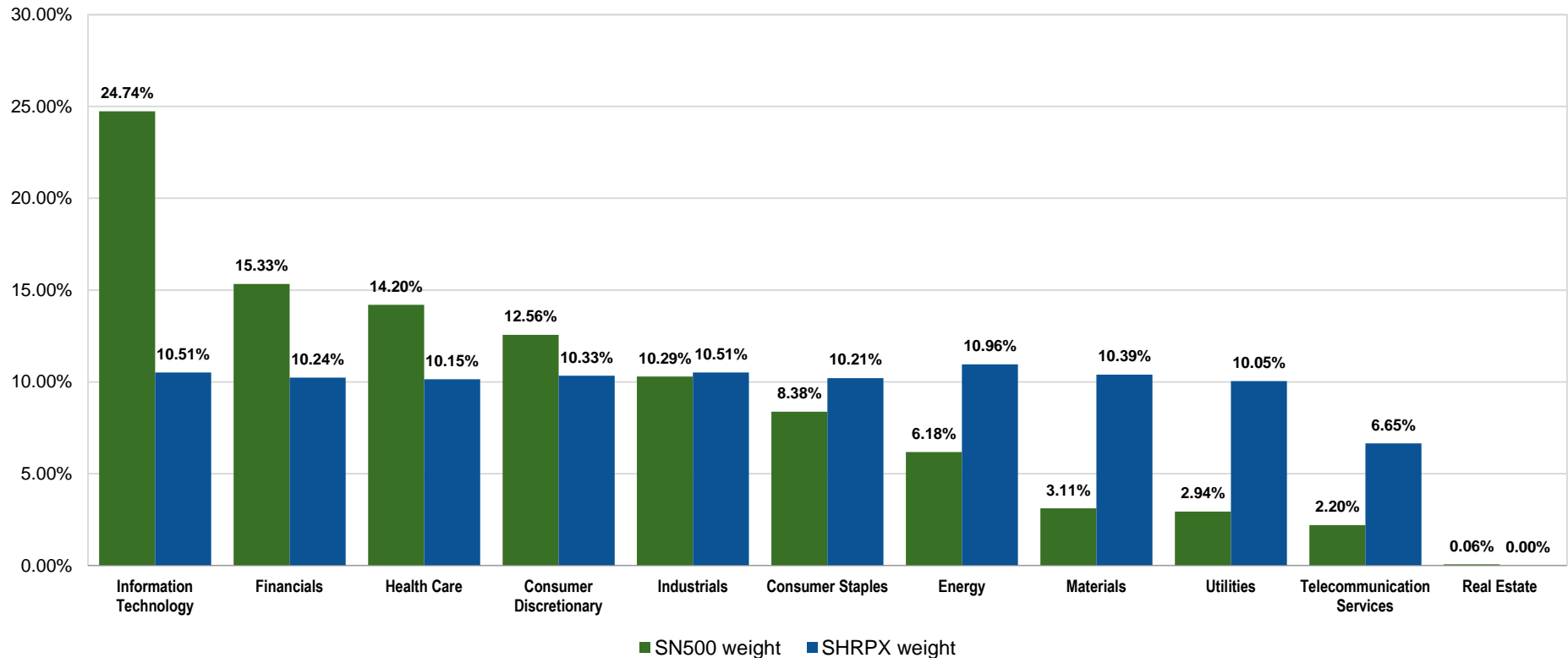
Consumer Discretionary	Consumer Staples	Energy	Financials*	Health Care
Dollar Tree Inc Hilton Worldwide Holdings Inc Home Depot Inc Horton D.R. Inc Pulte Group Inc	Costco Wholesale Corp Hormel Foods Corp Monster Beverage Corp New Tyson Foods Inc A Wal-Mart Stores	Concho Resources Inc EOG Resources Helmerich & Payne Inc Phillips 66 Valero Energy Corp	BlackRock Inc CME Group Inc A Cboe Global Markets Inc T Rowe Price Group Inc Torchmark Corp	AbbVie Inc. Align Technology Inc Intuitive Surgical Inc PerkinElmer Inc Zoetis Inc
Industrials	Information Technology	Materials	Telecommunication Services	Utilities
Deere & Co Fluor Corp Honeywell Intl Inc Illinois Tool Works Inc United Rentals Inc	Intel Corp Paychex Inc TE Connectivity Ltd. Texas Instruments Inc . Harris Corp	Air Products & Chemicals Inc Avery Dennison Corp Intl Flavors & Fragrances Praxair Inc Sherwin-Williams Co	AT&T Inc CenturyLink Inc Verizon Communications Inc	American Water Works Co Inc Entergy Corp Exelon Corp Public Service Enterprise Grp WEC Energy Group Inc

Source: S-Network, as of 12/31/2017

The S-Network Large-Cap Sharpe Ratio Index Offers Diversification by Sector and Company, Avoiding Concentrated Risk.

Sector Weight Comparison

SHRPX Index vs. SN500 Index



Source: S-Network, as of 12/31/2017

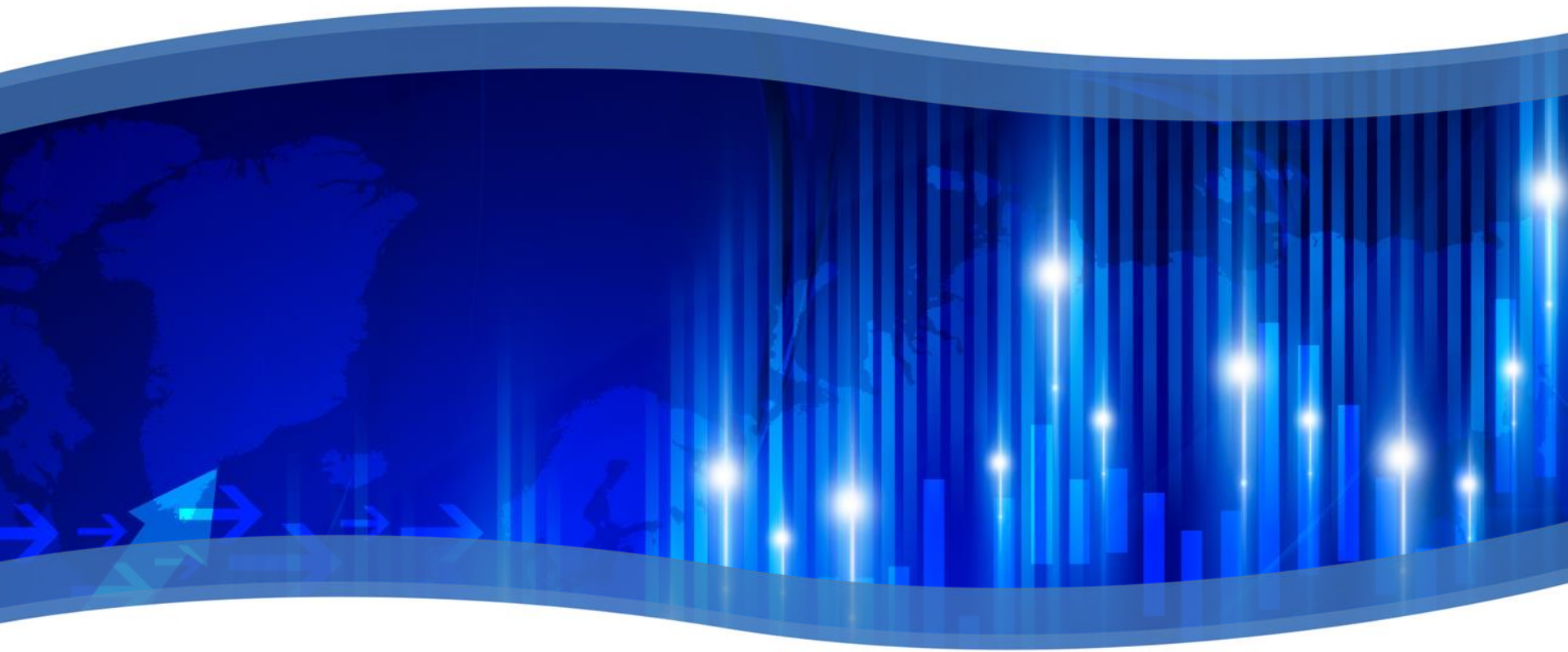
The S-Network Large Cap Sharpe Ratio Index Avoids Concentration in Those Sectors Offering the Highest Sharpe Ratios.

Index Fundamentals

Market Capitalization Profile	
Number of Constituents	48
Total Market Capitalization	2.75 Trillion USD
Largest Market Capitalization	292.54 Billion USD
Smallest Market Capitalization	7.02 Billion USD
Average Market Capitalization	57.29 Billion USD
Median Market Capitalization	31.61 Billion USD

Source: S-Network, as of 12/31/2017

**Solid Fundamentals and a Large Capitalization Bias Help Mitigate Risks
in the S-Network Large-Cap Sharpe Ratio Index.**



Statistical Profiles

Statistical Profile I

Calendar Year Ending Price Appreciation

	SHRPXTR Index	SN500 TR Index	Out/Underperformance
12/31/2000	9.26%	-9.54%	18.80%
12/31/2001	-4.12%	-12.89%	8.78%
12/31/2002	-16.70%	-21.28%	4.58%
12/31/2003	46.47%	27.52%	18.95%
12/31/2004	25.53%	10.27%	15.26%
12/31/2005	15.11%	5.64%	9.47%
12/31/2006	21.53%	15.86%	5.66%
12/31/2007	16.55%	6.97%	9.58%
12/31/2008	-38.39%	-36.61%	-1.78%
12/31/2009	44.54%	26.18%	18.36%
12/31/2010	16.10%	14.94%	1.16%
12/31/2011	1.35%	1.45%	-0.10%
12/31/2012	14.52%	15.84%	-1.32%
12/31/2013	37.00%	33.02%	3.99%
12/31/2014	14.92%	13.75%	1.17%
12/31/2015	2.49%	1.34%	1.15%
12/31/2016	7.48%	11.65%	-4.17%
12/31/2017	20.80%	22.56%	-1.77%

Source: S-Network, as of 12/31/2017

The S-Network Large-Cap Sharpe Ratio Total Return Index has Outperformed the SN500 Total Return Index in Thirteen of the Last Eighteen Years.

Statistical Profile II

Total Return Appreciation		
	SHRPXTR Index	SN500 TR Index
Since Inception*	557.77%	155.91%
10 Year	151.41%	127.50%
5 Year	109.51%	110.17%
3 Year	33.07%	38.82%
1 Year	20.80%	22.56%

Compound Annual Growth Rate		
	SHRPXTR Index	SN500 TR Index
Since Inception*	11.03%	5.36%
10 Year	9.66%	8.57%
5 Year	15.94%	16.02%
3 Year	9.99%	11.55%
1 Year	20.80%	22.56%

Source: S-Network, as of 12/31/2017

*From 12/31/1999

Statistical Profile III

Annualized Standard Deviation (Monthly)

	SHRPXTR Index	SN500 TR Index
Since Inception*	14.47%	14.51%
10 Year	14.89%	14.90%
5 Year	9.04%	9.56%
3 Year	9.31%	10.15%
1 Year	4.39%	3.88%

Sharpe Ratio (Monthly)

	SHRPXTR Index	SN500 TR Index
Since Inception*	0.6856	0.3209
10 Year	0.6736	0.6061
5 Year	1.6582	1.5796
3 Year	1.0237	1.0864
1 Year	4.1440	5.0596

Source: S-Network, as of 12/31/2017

*From 12/31/1999

Statistical Profile IV

Information Ratio (vs. SN500 TR, Monthly)

	SHRPXTR Index
Since Inception*	0.7558
10 Year	0.1925
5 Year	-0.0269
3 Year	-0.3104
1 Year	-0.3690

Jensen's Alpha (vs. SN500 TR, Monthly)

	SHRPXTR Index
Since Inception*	0.48%
10 Year	0.13%
5 Year	0.18%
3 Year	0.05%
1 Year	0.50%

Source: S-Network, as of 12/31/2017

*From 12/31/1999

Statistical Profile V

Correlation (vs. SN500 TR, Monthly)	
	SHRPXTR Index
Since Inception*	0.8844
10 Year	0.9388
5 Year	0.8993
3 Year	0.8800
1 Year	0.5500

R-Squared (vs. SN500 TR, Monthly)	
	SHRPXTR Index
Since Inception*	0.7821
10 Year	0.8814
5 Year	0.8087
3 Year	0.7744
1 Year	0.3025

Source: S-Network, as of 12/31/2017

*From 12/31/1999

Statistical Profile VI

Beta (vs. SN500 TR, Monthly)	
	SHRPXTR Index
Since Inception*	0.8822
10 Year	0.9386
5 Year	0.8502
3 Year	0.8068
1 Year	0.6217

Outperformance (vs. SN500 TR)	
	SHRPXTR Index
Since Inception*	401.86%
10 Year	23.92%
5 Year	-0.67%
3 Year	-5.75%
1 Year	-1.77%

Source: S-Network, as of 12/31/2017

*From 12/31/1999



Index Construction

Index Construction – Methodology

- ❑ **All Constituents of SHRPX Must Be Constituents of the S&P 500**
- ❑ **Selection Criteria for S&P 500 Include Requirements for:**
 - Sector Inclusion
 - Primary Exchange Listing
 - Minimum Market Capitalization
 - Minimum Average Daily Trading Volume
 - Other Factors
- ❑ **Individual Securities Included in SHRPX Selected Based on Ranking system Within Each Sector**
 - Selects the Five Stocks in Each Sector with Highest Sharpe Ratios as of the Last Business Day of the Second Month of Each Calendar Quarter
 - Sharpe Ratio is Computed Based on the 3-Month Average Stock Outperformance of the Risk-Free Rate Divided by the 3-Month Daily Standard Deviation of the Stock Price

The S-Network Large Cap Sharpe Ratio Index Uses A Stable and Transparent Construction Methodology.

Index Construction – Weighting and Deletions

- ❑ **Share Weights Based on Prices as of Close of Trading on Second Friday of Rebalancing Month**
- ❑ **Index Is Rebalanced Quarterly on the Third Friday of the Last Month of Each Calendar Quarter**
- ❑ **Index Is Rebalanced Quarterly Back to Equal Weights**
- ❑ **Stocks That Are Deleted From of S&P 500 Are Deleted from SHRPX Effective Upon Deletion from SN500**
- ❑ **If Fewer Than Five Eligible Securities are Represented in any GICS Sector as of Snapshot Date Only Those Securities Which Qualify are Included**



Index Details & Data Distribution

- ❑ **Index Values Distributed in Real Time (15 second snapshots) in USD and EUR**
- ❑ **Total Return Index Calculated Daily in USD and EUR**
- ❑ **Index Values Distributed via Consolidated Tape**
- ❑ **Comprehensive Historic Data (including simulated back-tests from 12/31/1999)**
 - Daily Prices for Price-Only + TR Indexes in USD + EURO
 - Quarterly Portfolio Snapshots (Historic Constituents and Weights)
- ❑ **Extensive Analytic support**
 - Quarterly Reports (“Index Insights”)
 - Industry Overviews
 - Extensive Statistical Data
- ❑ **Broad data distribution via third party vendors**
 - S&P/Bloomberg/Yahoo, etc.
 - S-Network contribution page on Bloomberg: SNET

Company History

❑ **Standard & Poor's Custom Index Group**

S&P Indices recognizes that no single index meets the needs of all investors. A custom index calculated by S&P Indices enables our clients either to refine existing S&P indices to reflect tailored measurements of market performance, or to create a unique index as the basis for a new derivative investment product. Drawing on this expertise and a global database of over 17,000 individual stocks, the S&P Custom Index Group provides an independent, flexible and accurate service enabling clients to purposefully design a Custom Index to meet their specific requirements.

❑ **S-Network Global Indexes**

S-Network Global Indexes, Inc. is a publisher and developer of proprietary and custom indexes. Founded in 1997, S-Network publishes over 200 indexes, which serve as the underlying portfolios for financial products with over USD 5 billion in assets under management. S-Network indexes, which are supported by a state-of-the-art technology platform, are known for their transparency and efficiency.

S-Network is a leader in socially responsible investment, publishing best-practice benchmark indexes in collaboration with Thomson Reuters. S-Network published the first global alternative energy and water indexes, which today serve as the recognized benchmarks for those sectors worldwide. In addition to publishing socially responsible indexes, S-Network produces proprietary environmental, social and governance ratings on nearly 5,000 public companies worldwide.

S-Network publishes a comprehensive suite of benchmark indexes covering US, European, Pacific Basin and emerging markets companies and mirroring the performance characteristics of the most popular indexes. The benchmark series offers detailed historical data, including daily constituent level data, from December 31, 1999 to the present. S-Network benchmarks serve as starting universes for smart beta indexes, as institutional-quality performance benchmarks, and as bases for Separately Managed Accounts.

S-Network is a prominent provider of smart beta indexes that incorporate both standard market statistics, as well as unique and highly specialized proprietary data sets derived from non-traditional sources. Smart beta indexes developed by S-Network embrace powerful single-factor models as well as complex multi-factor models that incorporate over 200 discrete factors. All indexes developed by S-Network address and resolve issues such as liquidity, investability and index turnover characteristics.