Quality Value Portfolio

ACTIVE SEPARATELY MANAGED ACCOUNT

STRATEGY: US Large Cap Value
BENCHMARK: Russell 1000® Value

ORGANIZATION:

Northern Trust has been providing investment management services to investors since 1889. Our disciplined investment strategies seek to meet your wealth goals by combining extensive research, active risk management, and well-defined buy/sell criteria.

OBJECTIVE:

The Quality Value Portfolio (QVP) is designed to provide consistent and systematic exposure to high-quality, value-oriented securities while avoiding those showing signs of distress in a disciplined portfolio construction framework. The strategy seeks to deliver a diversified portfolio designed to generate 200 to 300 basis points of outperformance per annum over a full market cycle. The strategy is suited for investors with a longer time horizon who seek to efficiently capture the value premium.

INVESTMENT APPROACH:

The Quality Value Portfolio strategy is designed to provide exposure to value and quality factors. Our research shows that high quality companies tend to outperform over time. Additionally, our research shows that value stocks have historically outperformed broad market benchmarks. We believe that the combination of high quality and value stocks can provide positive relative returns over the long term.

The QVP strategy provides consistent value exposure which has been shown to lead to outperformance over the market portfolio, as evidenced by Fama French research. The addition of our proprietary quality score is designed to improve the absolute return, volatility, and drawdown of the portfolio based on the avoidance of deep value traps. Risk relative to the benchmark is derived from quality and value, as intended; risk from sectors, regions, and factors is minimized. As a result of our disciplined portfolio construction approach, QVP is characterized by lower sector concentration, consistent beta exposure, and more diversified holdings than many other value-oriented equity investment options.

PORTFOLIO CHARACTERISTICS[1]

	Portfolio	Benchmark
Number of Holdings	100	722
Representative Annual Turnover	60-80%	N/A
P/E Ratio	14.4x	17.2x
P/B Ratio	1.8x	2.1x
Annualized Dividend Yield	2.7%	2.6%
Wtd Avg Mkt Cap. ($ millions)	$114,543	$125,786

SECTOR WEIGHTINGS[1] (% Equities)

	Portfolio	Benchmark
Communication Services	6.0	6.9
Consumer Discretionary	4.6	5.3
Consumer Staples	7.7	7.9
Energy	8.7	9.7
Financials	21.9	21.7
Health Care	16.3	15.3
Industrials	6.9	7.8
Information Technology	10.8	9.8
Materials	5.0	4.0
Real Estate	6.1	5.2
Utilities	6.1	6.4
Total	**100.0%**	**100.0%**

Sectors may not equal 100% due to rounding.

TOP TEN HOLDINGS[1] (% Portfolio)

	Portfolio	Sector
Chevron Corporation	3.3	Energy
Pfizer Inc.	3.2	Health Care
Procter & Gamble Company	2.8	Consumer Staples
Intel Corporation	2.6	Information Technology
Cisco Systems, Inc.	2.5	Information Technology
Bank of America Corp	2.5	Financials
Citigroup Inc.	2.2	Financials
Oracle Corporation	2.0	Information Technology
Medtronic plc	2.0	Health Care
Exxon Mobil Corporation	1.9	Energy
Total	**24.9%**	

1) The portfolio holdings, characteristics and sector allocations are that of a model portfolio and is provided for illustrative purposes only, subject to change and can vary for actual accounts. This Information is not a recommendation to buy or sell any security. There is no assurance that any security discussed was profitable or will prove to be profitable. Source: FactSet

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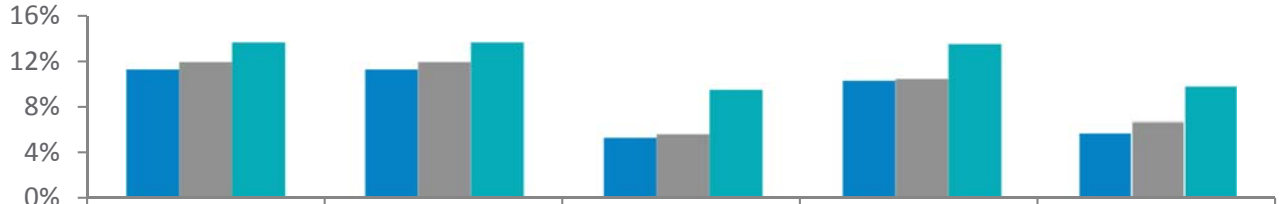
INVESTMENT PERFORMANCE COMPARISON



	QTD	YTD	1 YR	3 YR	Since 11/30/14
QVP (Gross)	11.28%	11.28%	5.37%	10.30%	5.74%
R1000V	11.93%	11.93%	5.67%	10.45%	6.71%
S&P 500	13.65%	13.65%	9.50%	13.51%	9.79%

Returns are annualized for periods greater than one year.

CALENDAR YEAR RETURNS AND ASSETS

QUARTERLY RETURNS (GROSS)					YEAR TO DATE		AS OF YEAR-END (except for current period)					
	1Q	2Q	3Q	4Q	Composite (GROSS)	Russell 1000® Value Index	# of Accounts	Comp Assets ($MIL)	% Firm Assets	Internal Dispersion	3YR Annualized Composite Std. Deviation	3YR Annualized Index Std. Deviation
2019	11.28				11.28	13.65	29	27	0.10	N/A	10.90	10.48
2018	-2.54	1.89	5.15	-11.62	-7.72	-8.27	30	25	0.10	0.33	11.32	10.82
2017	2.11	0.76	2.93	5.61	11.83	13.66	32	29	0.10	0.50	10.72	10.20
2016	0.12	2.41	4.99	8.68	17.00	17.34	38	32	0.10	0.30	N/A	10.77
2015	0.29	0.51	-9.19	2.76	-5.94	-3.83	46	36	0.10	0.16	N/A	10.68

Northern Trust Asset Management comprises Northern Trust Investments, Inc. (NTI), Northern Trust Global Investments Limited (NTGIL), Northern Trust Global Investments Japan, K.K.(NTGIJ), the investment advisor division of The Northern Trust Company (TNTC) and its subsidiaries to offer investment products and services to personal and institutional markets. As of September 2011, the Northern Trust Global Securities Lending Program Division, a division of Northern Trust Asset Management, has been included in the GIPS® firm. For purpose of compliance with the Global Investment Performance Standards (GIPS®) the firm is defined as Northern Trust Asset Management Services, a subset of Northern Trust Asset Management, and includes those investment products managed by NTI, NTGIL, NTGIJ and TNTC that are distributed through global channels. As of 12/31/2018 Northern Trust Asset Management had assets under management totaling $885.3 billion of which $826.7 billion is part of the GIPS firm. Description: The Quality Large Cap Value Portfolio composite consists of all fee-paying, fully discretionary Northern Trust Quality Large Cap Value portfolios managed by Northern Trust Asset Management – Investment Solutions in the Northern Trust Wealth Management managed accounts program. **Prior to 4/1/2018, the composite was referred to as Engineered Quality Large Cap Value Portfolio. Effective 4/1/2018, we have eliminated the use of the "Engineered Equity" brand name and adopted common industry language and classification to more effectively position our investment strategies**. The composite does not include wrap accounts. The composite was created on 11/30/2014. Financial leverage is not employed as a part of the overall investment strategy. Financial derivatives, in the form of futures contracts and options, may be utilized for the purposes of liquidity, market exposure or investment opportunity. The internal dispersion of annual returns is measured by the standard deviation across asset-weighted portfolio returns represented in the composite for the full year. If fewer than 5 portfolios are in the composite for a full year, internal dispersion is deemed not applicable. The three year annualized standard deviation is calculated using monthly returns. If the composite has been open for less than three years, the three year annualized standard deviation is deemed not applicable. The primary benchmark for this composite is the Russell 1000® Value Index. The Russell 1000® Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values. An investment cannot be made directly in an index. Historical performance of the Russell 1000® Value Index is provided for illustrative purposes only and is not indicative of the performance of any NTI managed portfolio. Index performance results do not account for investment management fees or transaction costs. Performance return results reflect the reinvestment of dividends and other earnings, and are expressed in U.S. dollars. Performance return figures presented gross of management fees have been calculated after the deduction of all transaction fees and commissions. The standard annual total fee schedule is as follows: 0.45% on total assets. To illustrate the effect of the compounding of fees assuming a $5 million account which earned a 10% annual return and paid an annual fee of .45% the account would grow in value over five years to $8.05 million before fees and $7.89 million after deduction of fees. Northern Trust Asset Management Services has been verified by an independent verifier for the period from January 1, 1993 through December 31, 2017. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS® standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS® standards. Past performance is no guarantee of future results. A copy of the verification report is available upon request. Northern Trust Asset Management Services has prepared and presented this report in compliance with GIPS®. Prior to 1/1/93, all discretionary accounts may not have been included in a composite. A complete list and description of Northern Trust Asset Management Services' composites and additional information regarding policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. **For one-on-one presentations only.**