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Using Factors to Manage Equity Risk and Return

Ryan Shelby, CAIA

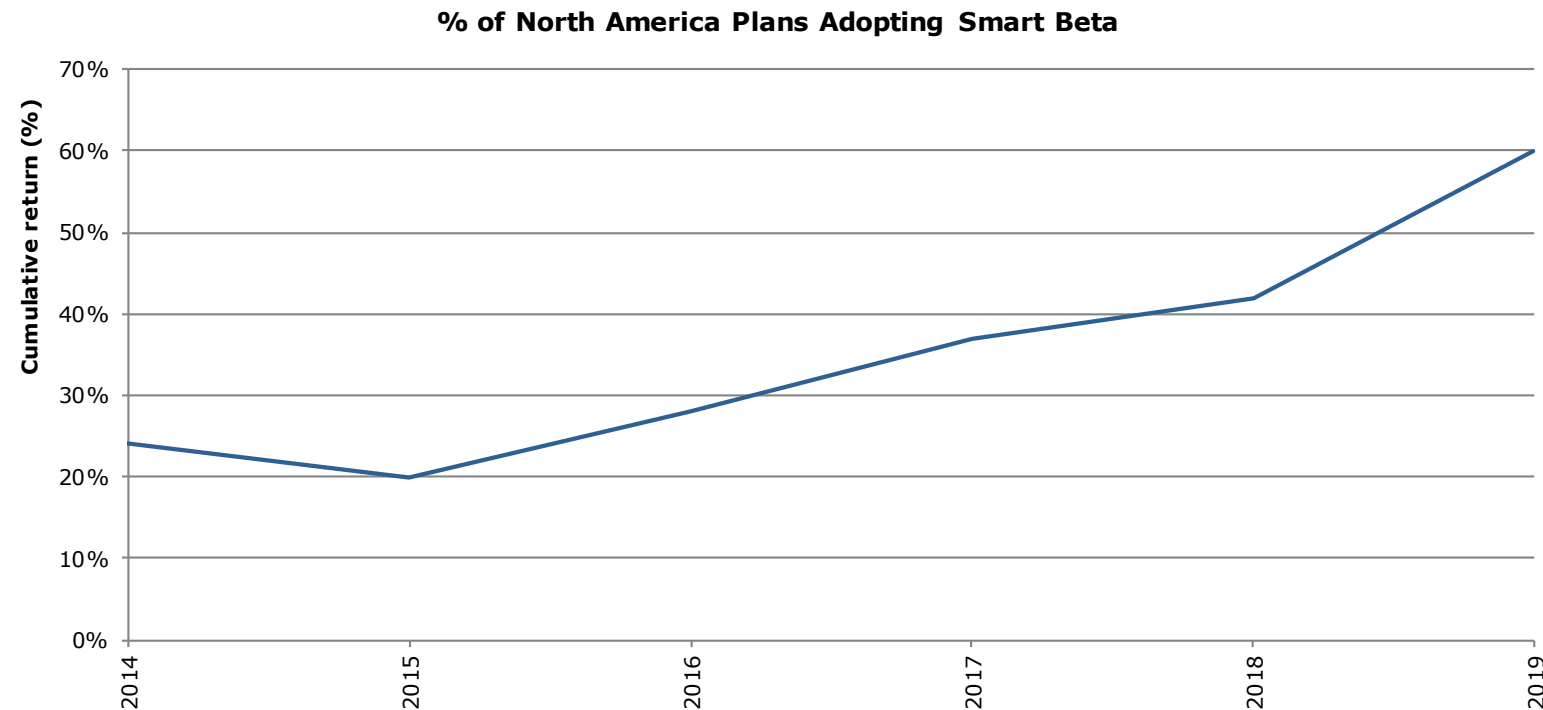
Head of Factor Solutions, Analytic Investors



Smart beta industry trends

Smart Beta continues to gain momentum

- The smart beta adoption rate continues to increase, with growth across all plan sizes

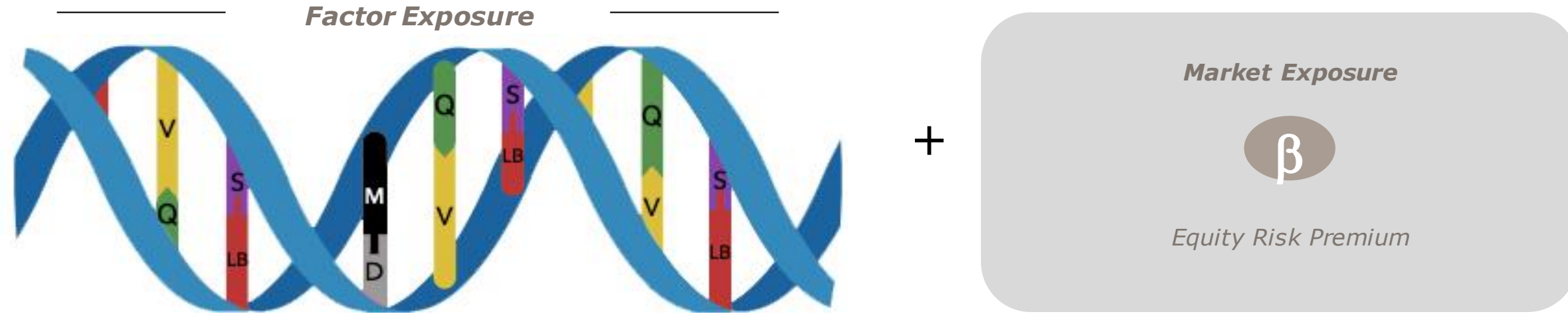


- **Multifactor** and **Low Volatility** are the two most utilized smart beta strategies
- **Return enhancement, risk reduction, diversification,** and **cost savings** are the top objectives cited by investors

Source: 2019 FTSE Russell Smart Beta Asset Owner Survey.

What is factor-based investing (smart beta)?

- Like DNA, a factor is a primary characteristic of a portfolio that explains its performance over long periods of time.



- Factor-based strategies, also known as “smart beta”, target exposure to investment characteristics that may be key drivers of excess returns



Factors are key building blocks of risk and return

Is alpha *skill*, or simply factor return?

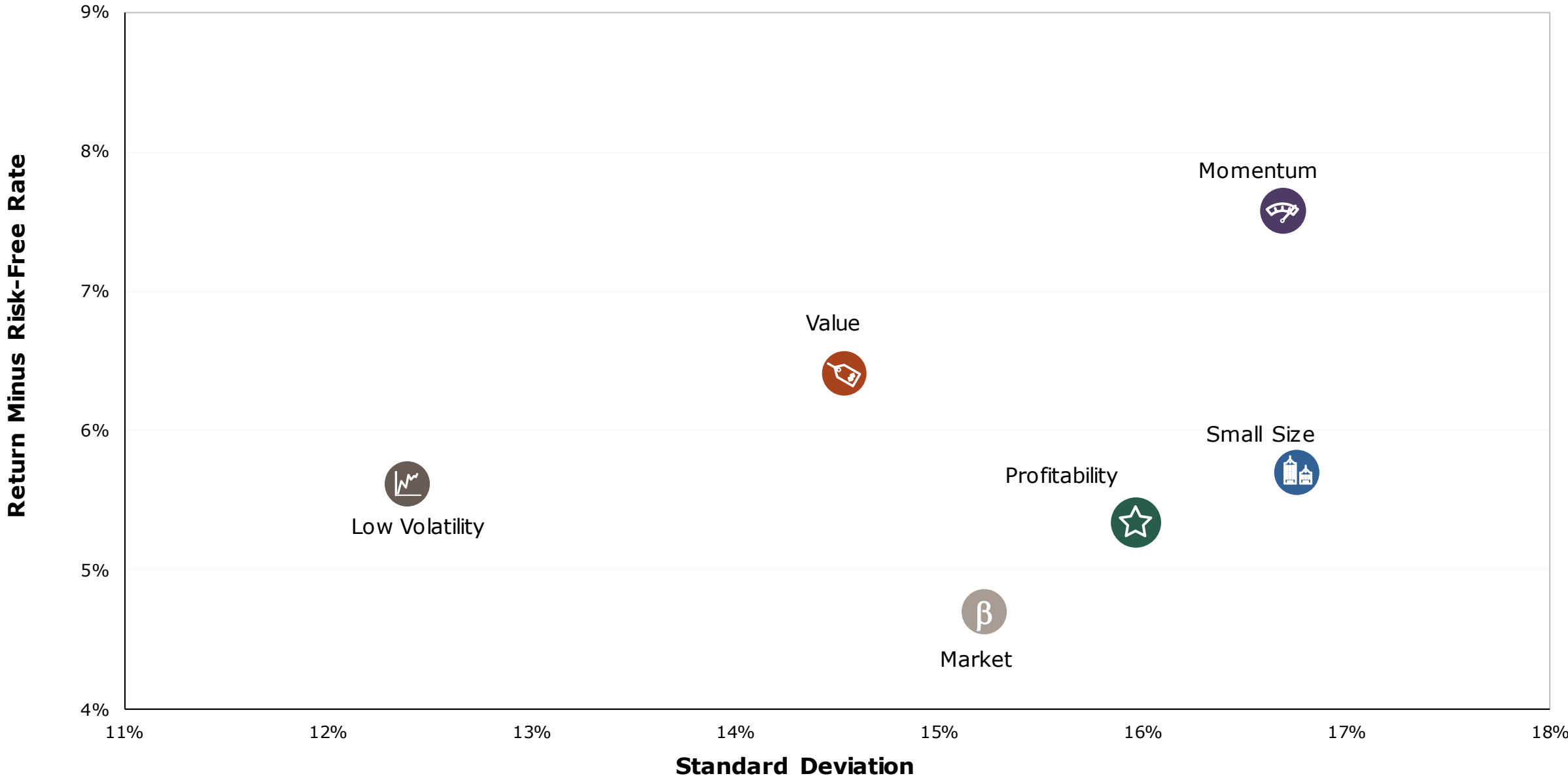
Smart beta harvests factor returns that were previously attributed to manager skill



Smart Beta offers the benefits of active at the cost of passive

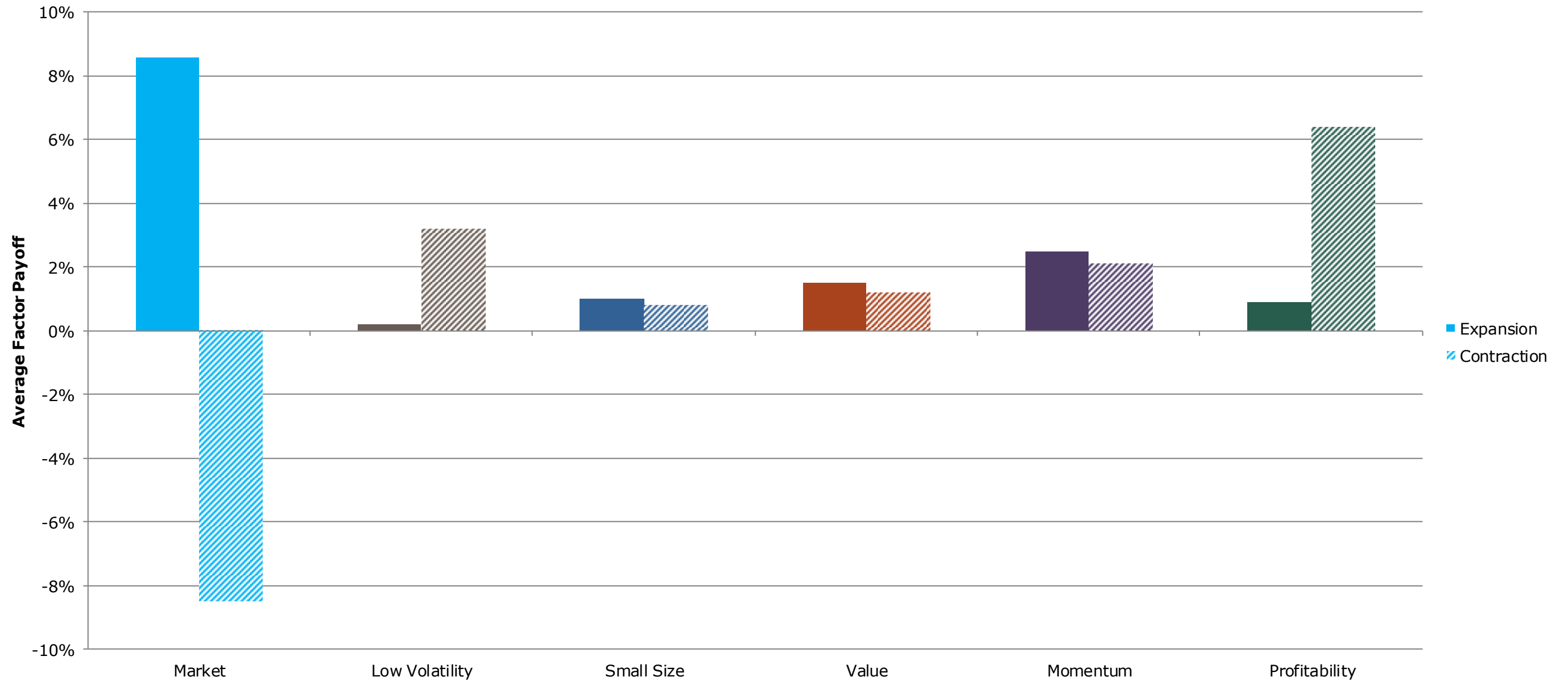
Source: Wells Fargo Asset Management. For illustrative purposes only.

The Benefits of Factor Investing (1976 – 2018)



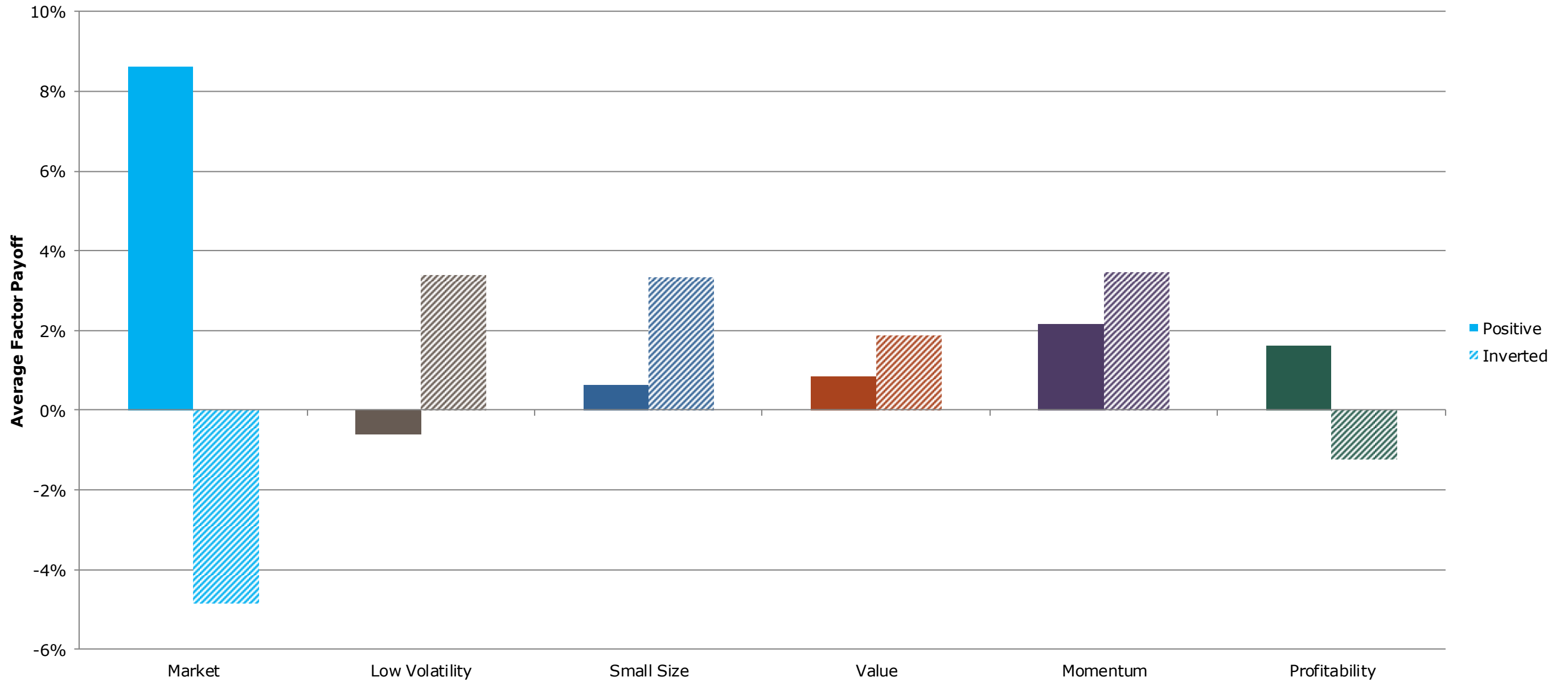
Source: Analytic Investors. Based on hypothetical data as described in Roger Clarke, Harindra de Silva, and Steven Thorley., 2017, "Pure Factor Portfolios and Multivariate Regression Analysis" Spring 2017 edition of the Journal of Portfolio Management. **Past performance is not a guarantee of future results.**

Factor returns and the economic cycle (1967-2018)



Source: Analytic Investor. Factors here are as described in Roger Clarke, Harindra de Silva, and Steven Thorley, 2017, "Pure Factor Portfolios and Multivariate Regression Analysis" Spring 2017 edition of the Journal of Portfolio Management in order to cover a longer time period. Data covers the period 1967-2018 and is generated using the largest 1,000 U.S. common stocks with sufficient data (e.g., 36 months of prior returns, prior-year accounting).

Factor returns and the yield curve (1967-2018)



Source: Analytic Investor. Factors here are as described in Roger Clarke, Harindra de Silva, and Steven Thorley, 2017, "Pure Factor Portfolios and Multivariate Regression Analysis" Spring 2017 edition of the Journal of Portfolio Management in order to cover a longer time period. Data covers the period 1967-2018 and is generated using the largest 1,000 U.S. common stocks with sufficient data (e.g., 36 months of prior returns, prior-year accounting). There are 514 positively sloped months vs 110 negatively sloped months.

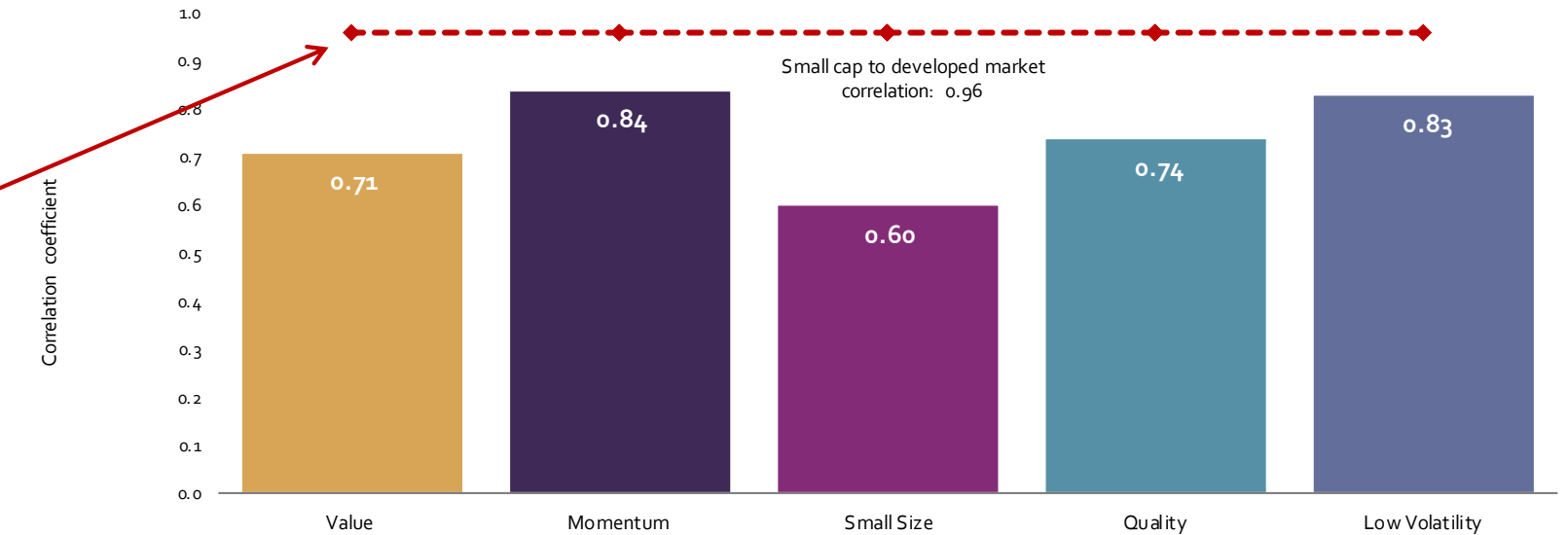
Factors offer strong diversification benefits

The correlation is lower between factors than between asset classes

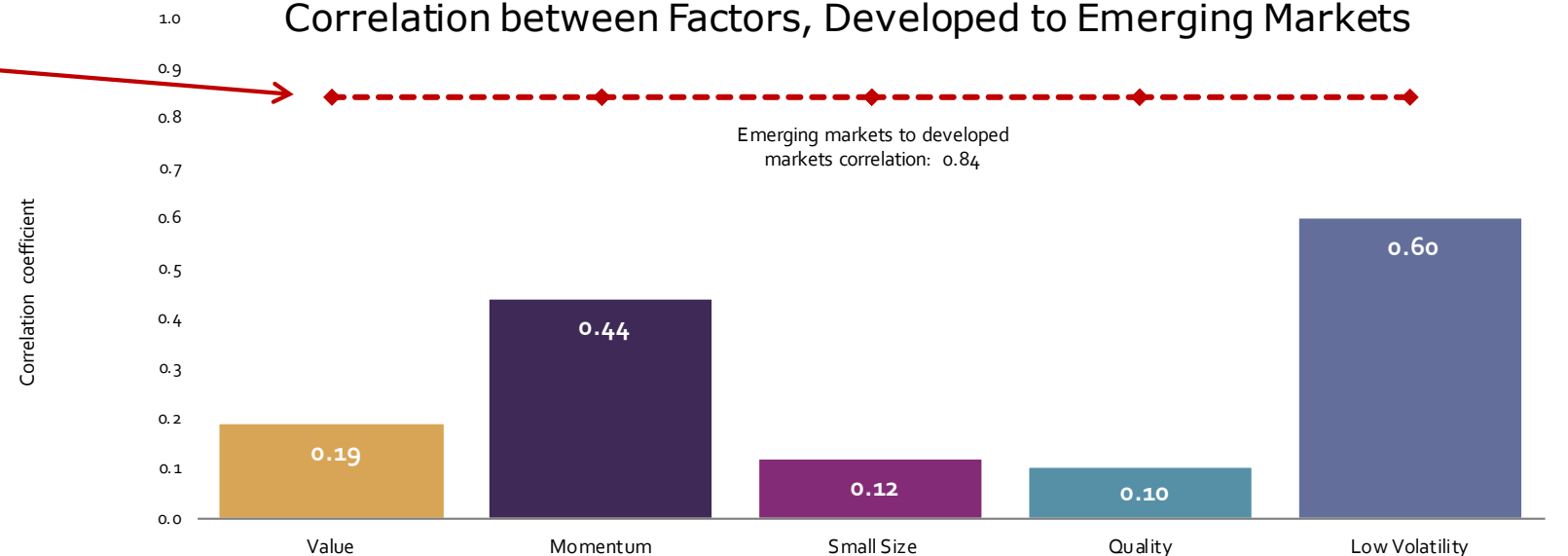
Monthly Return Correlation
July 1998 to June 2019

MSCI Indices	MSCI World Index (Net)	MSCI World Small Cap Index (Net)	MSCI Emerging Markets Index (Net)
MSCI World Index (Net)	1		
MSCI World Small Cap Index (Net)	0.96	1	
MSCI Emerging Markets Index (Net)	0.84	0.83	1

Correlation between Factors, Developed Markets to Small Cap



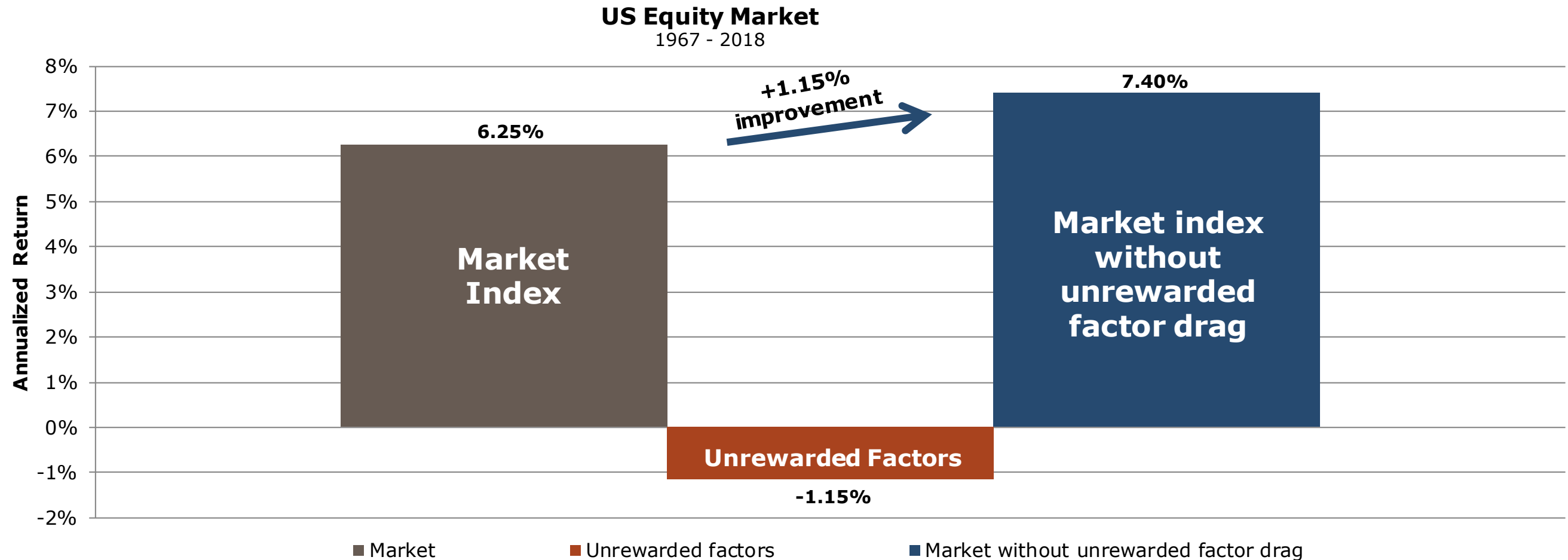
Correlation between Factors, Developed to Emerging Markets



Source: Analytic Investors and MSCI, June 30, 2019.

Why Multifactor? More efficient equity exposure

Index exposure is low cost but comes with unrewarded factor exposures



Smart Beta offers the benefits of passive while avoiding the dead weight

Source: Analytic Investors. For illustrative purposes only. Pure factor portfolio as described in Roger Clarke, Harindra de Silva, and Steven Thorley, 2017, "Pure Factor Portfolios and Multivariate Regression Analysis" Spring 2017 edition of the Journal of Portfolio Management studying the monthly returns and factor exposures on 1,000 large US stocks for the 50 years ending 2018. "Market without unrewarded factor drag" is defined as the market return plus an equal-weighted blend of Value, Small Size, Quality, and Momentum factor portfolios. **Past performance is no guarantee of future results.**

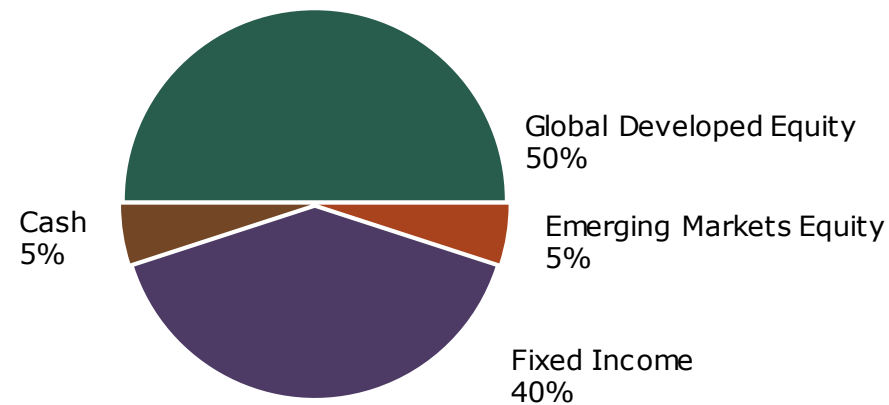
Deploying multifactor equity strategies

Challenge: Desire for low-cost equity exposure and increased returns without additional equity risk

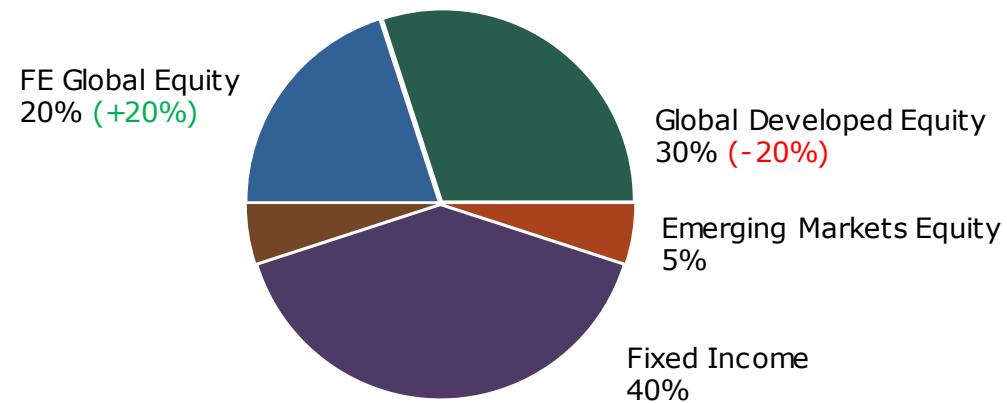
Solution: Replace passive management with Factor Enhanced Global Equity

- ✓ Preserves the benefits of passive management such as low turnover and low fees
- ✓ Offers exposure to proven sources of return and increases the odds of outperforming the market

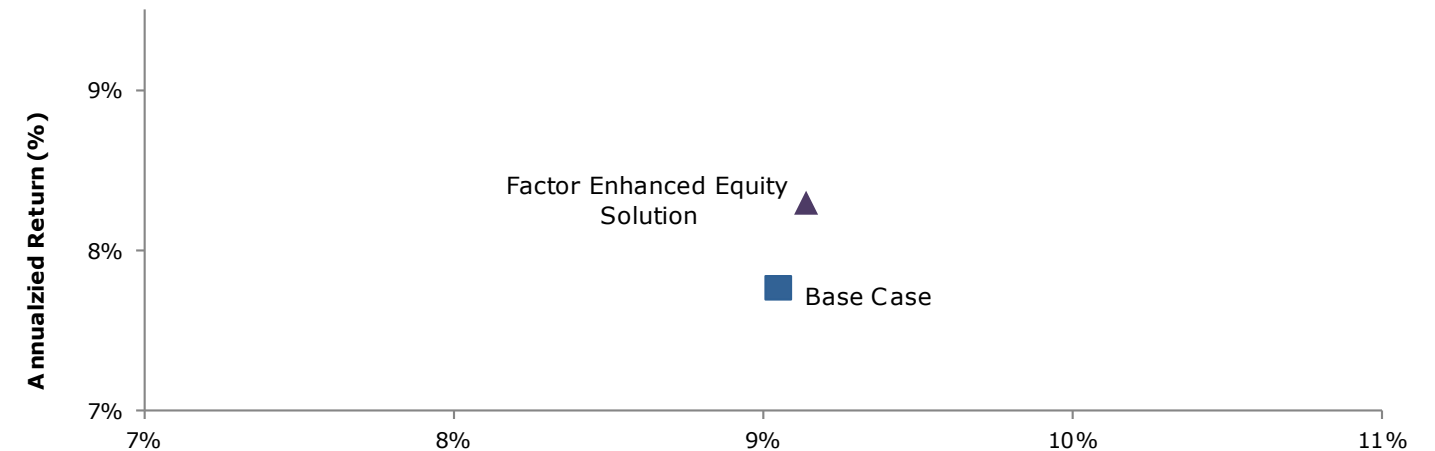
Base Case: Passive Index Exposure



Solution: Factor Enhanced Equity



Risk/Return
October 2002 – June 2019



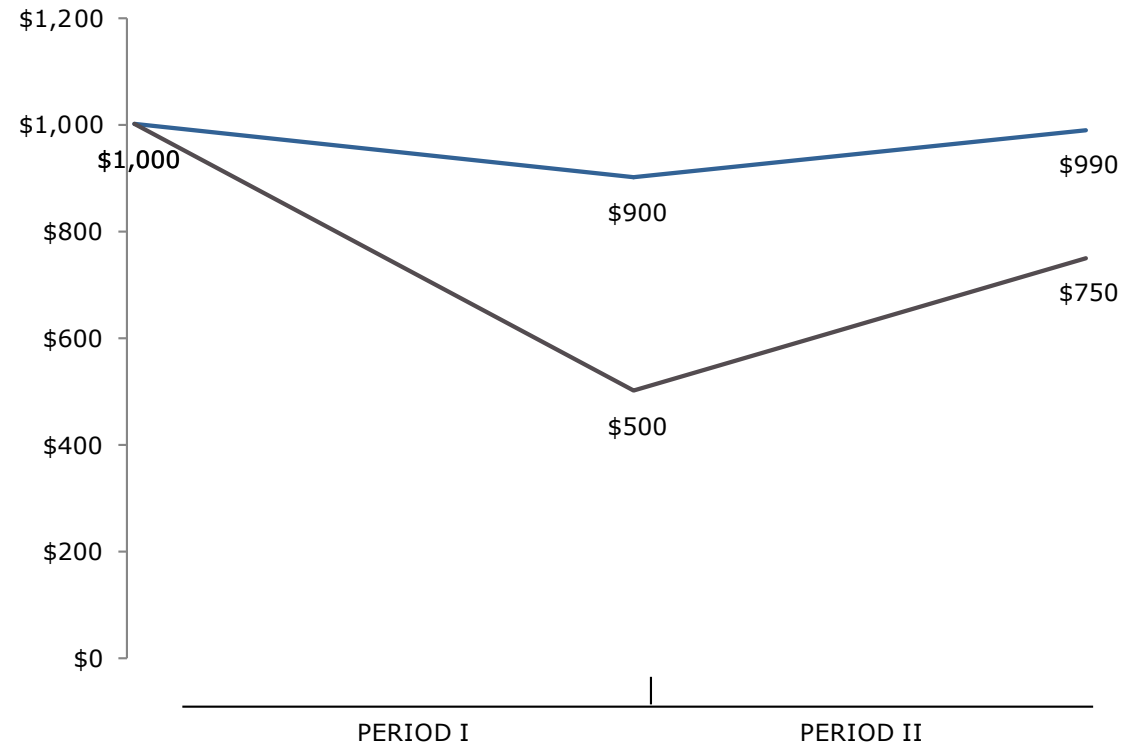
Standard Deviation (%)

	Passive Index Exposure	Factor Enhanced Solution	Impact
Return	7.27%	7.80%	+0.53%
Volatility	9.05%	9.14%	+0.99%
Risk-Adjusted Returns	0.80	0.85	+6.25%
Tracking Error	-	0.51	
Information Ratio	-	0.21	

Source: FactSet. The hypothetical model is not maintained as a live composite or portfolio at Wells Fargo Asset Management. It is for illustrative purposes only. Hypothetical data does not represent actual performance and should not be interpreted as an indication of such. This data is based on knowledge that was available after the fact and thus with the benefit of hindsight. The broad market asset classes in the Base Case and Solutions are represented by the following proxies: Global Developed Equity: MSCI World Index; Emerging Markets Equity: MSCI Emerging Markets Equity Index; Fixed Income: FTSE WGBI; Cash: LIBOR – 3 Month. **Hypothetical past performance is no guarantee of future results.**

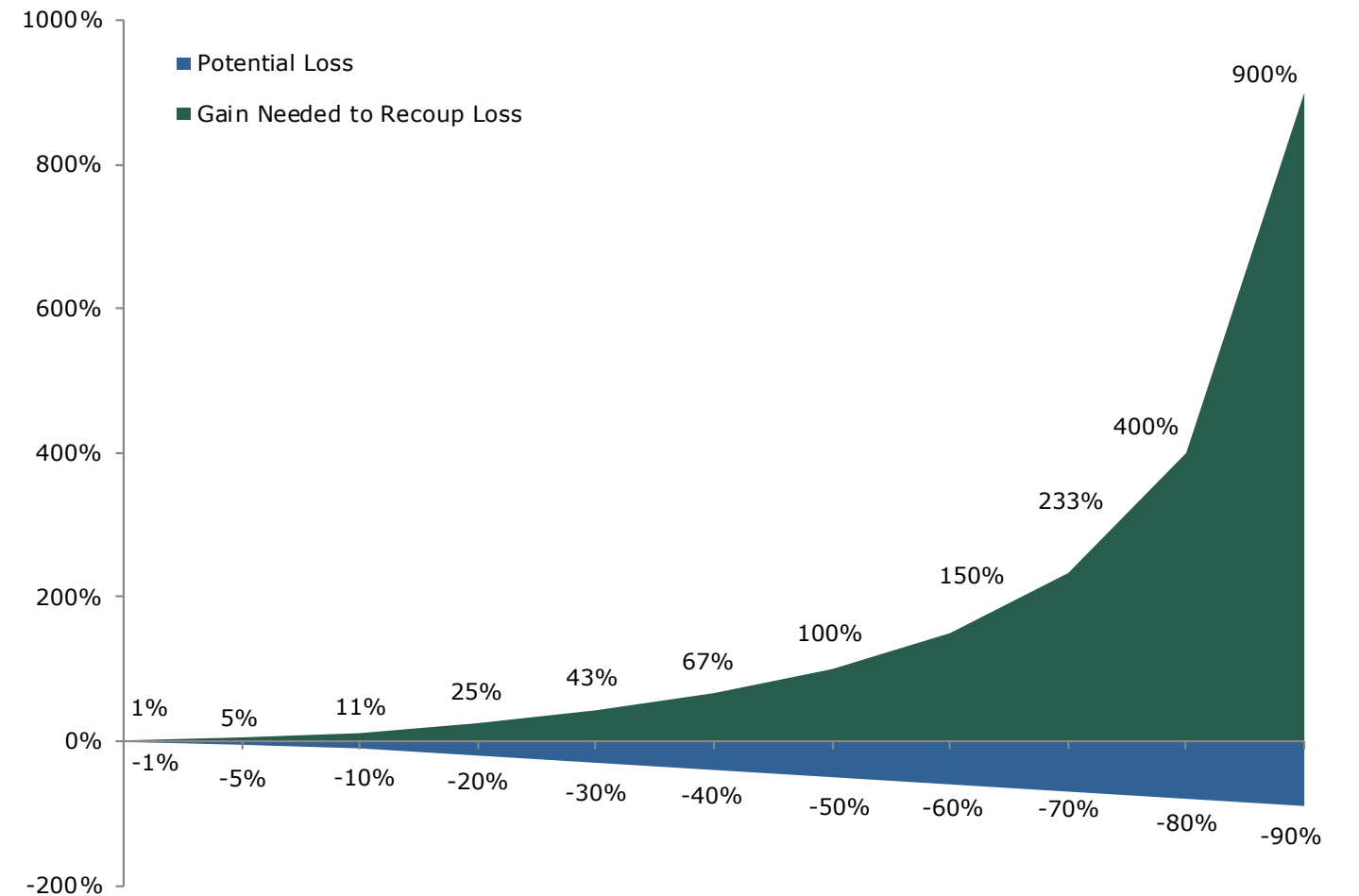
Why low volatility? Downside protection

Downside protection trumps upside participation



	Period I	Period II	Simple Average	Volatility Drag	Compounded Return
Scenario 1	-10%	+10%	0%	→	-1%
Scenario 2	-50%	+50%	0%	→	-25%

Implication of a significant market drawdown

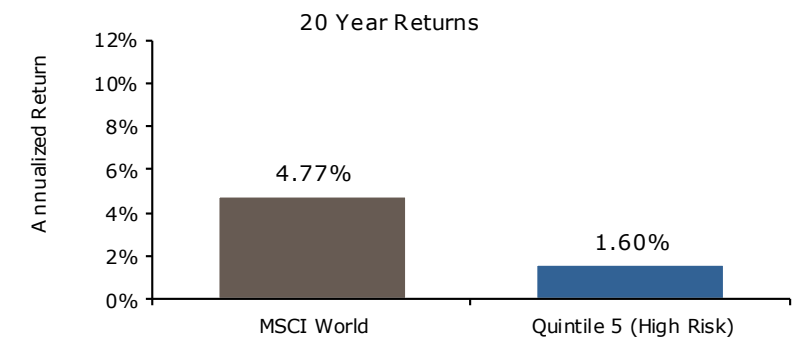
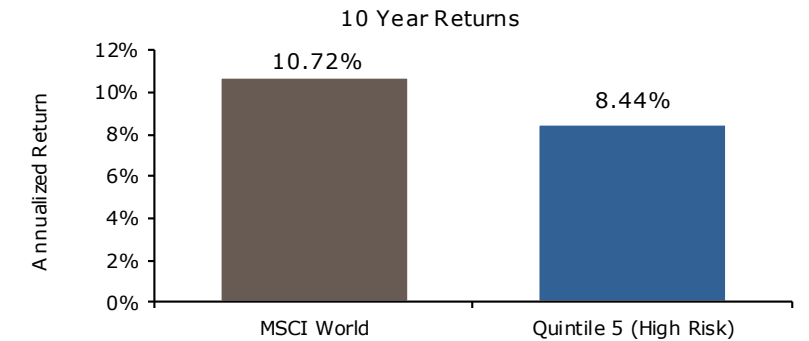
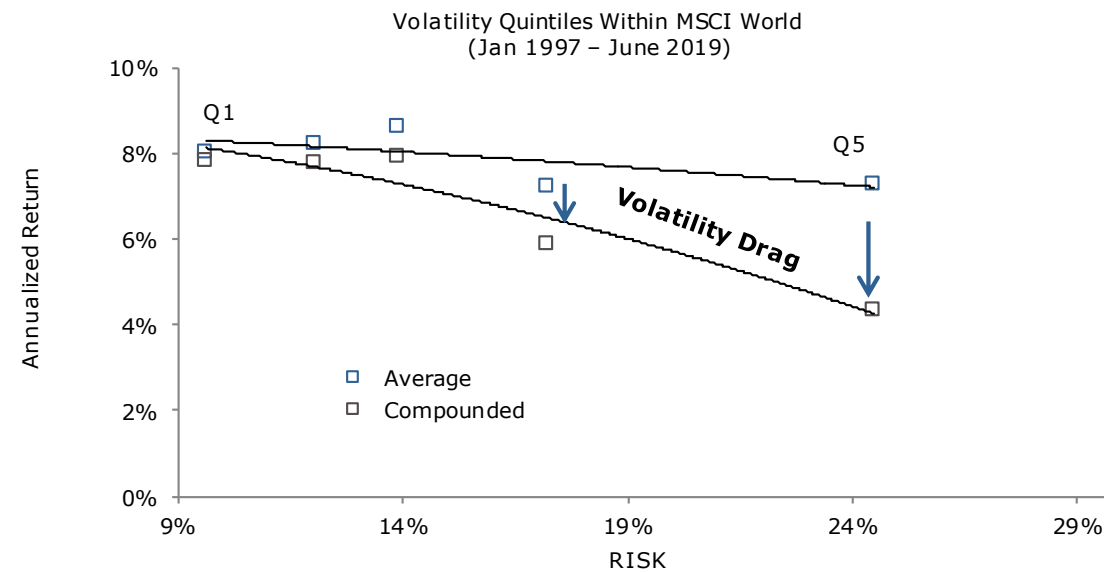
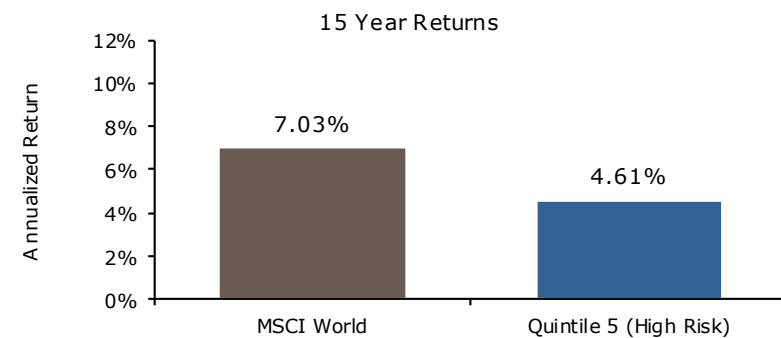
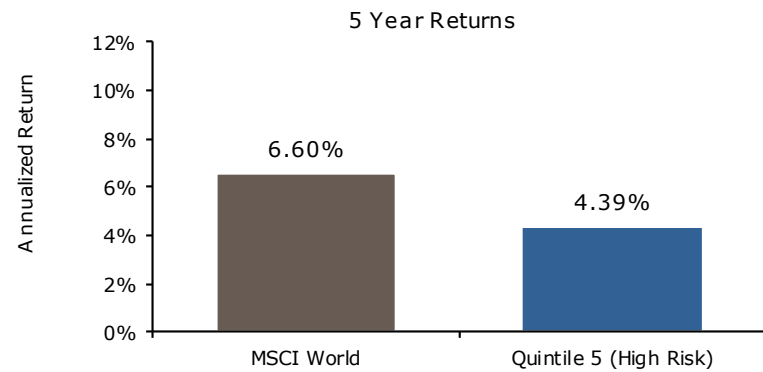


Low Volatility wins by not loosing

Source: Analytic Investors. For illustrative purposes only.

High volatility underperforms

MSCI World vs High Beta Stocks (As of June 30, 2019)

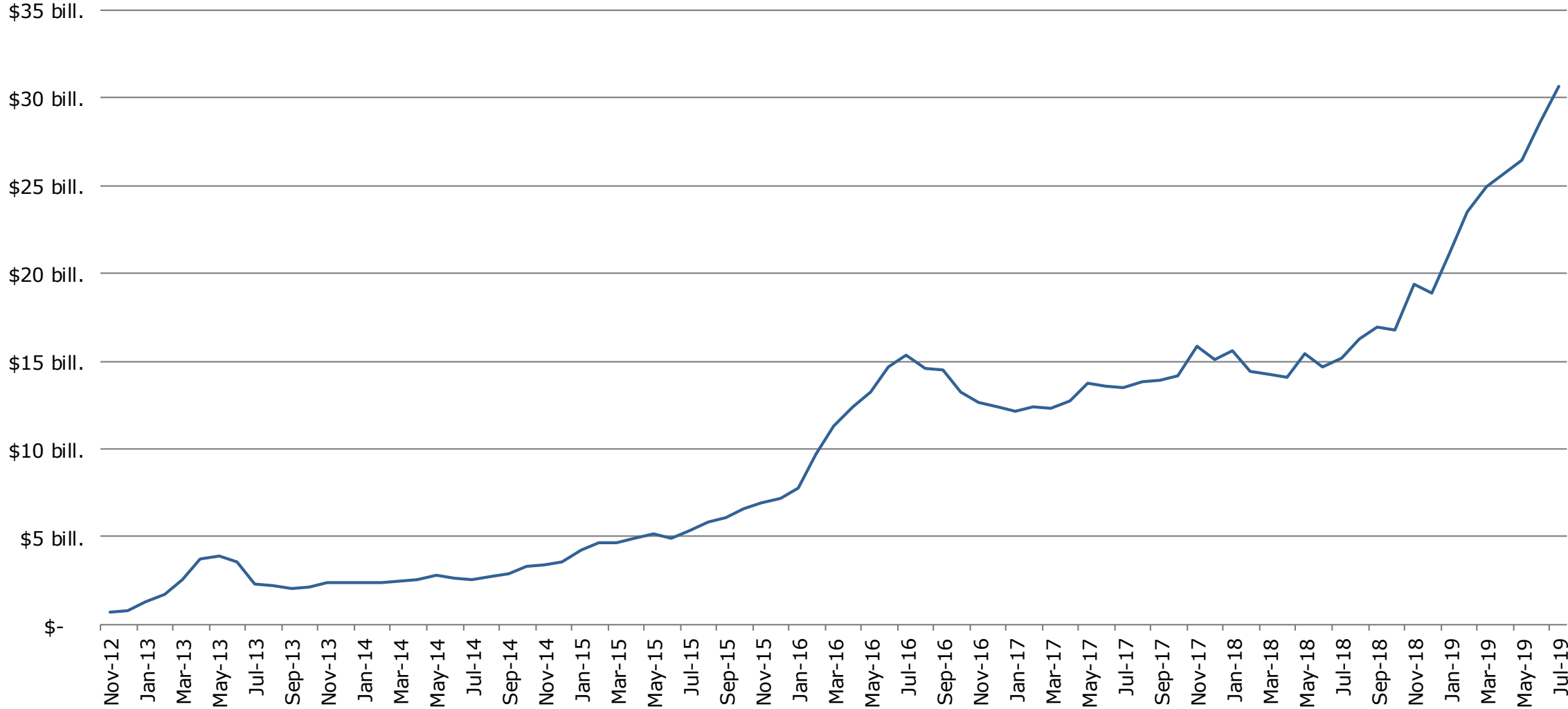


Sources: Analytic Investors, FactSet, Barra, MSCI.

Average return is the arithmetic average. Portfolios were formed monthly based on Barra's beta forecast. For illustrative purposes only. High beta stocks were selected using Barra's risk model to ranks stocks from high to low based on predicted market risk (beta). High beta stocks fall into quintile 5. **Past performance is not a guarantee of future results.**

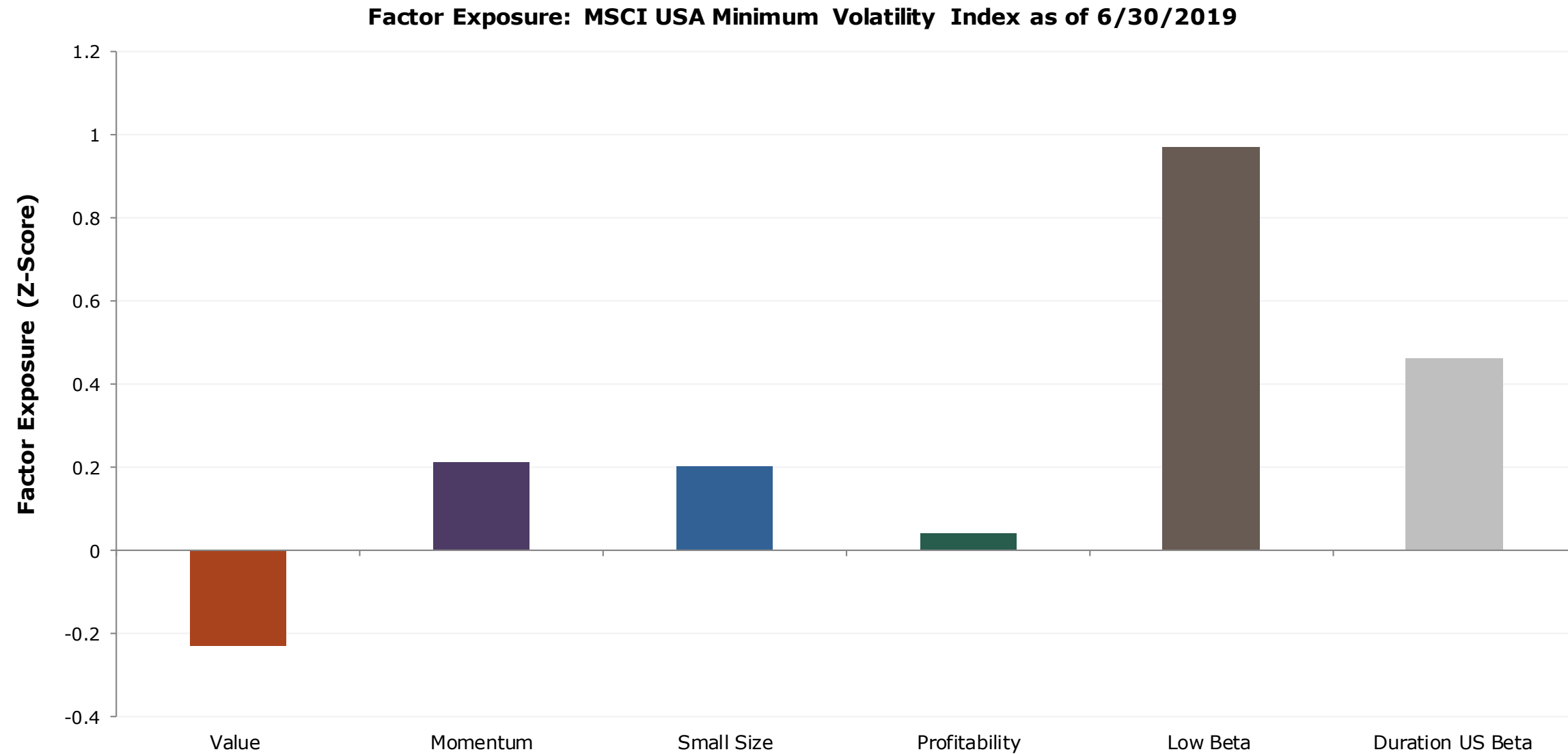
Low volatility ETFs are becoming increasingly popular

iShares Edge MSCI Min Vol USA ETF AUM (\$)



Source: eVestment. As of July 2019.

Low Vol ETFs - Not the smartest Beta in the room

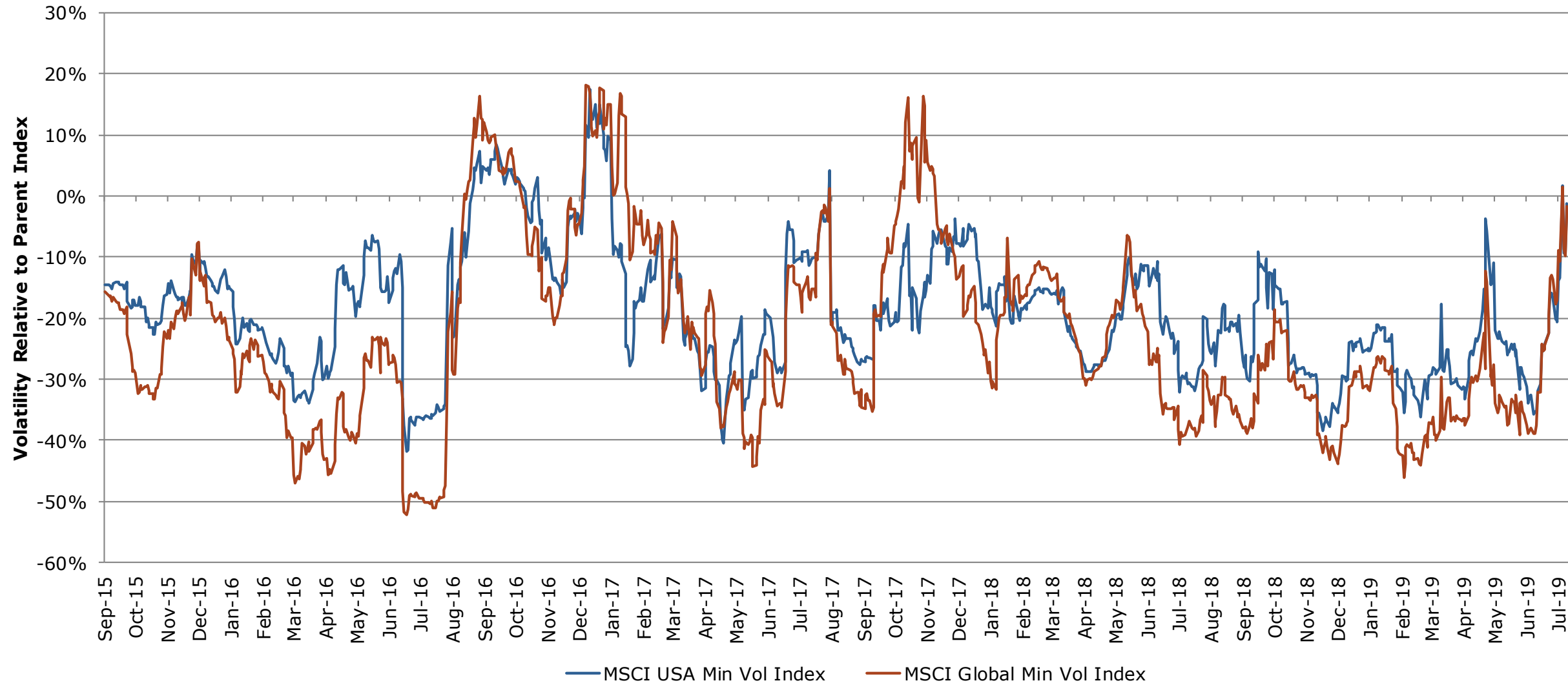


Source: Analytic Investors. Based on hypothetical data as described in Roger Clarke, Harindra de Silva, & Steven Thorley, 2017, "Pure Factor Portfolios and Multivariate Regression Analysis" Spring 2017 edition of the Journal of Portfolio Management.

Low Vol ETFs are not necessarily Low Volatility

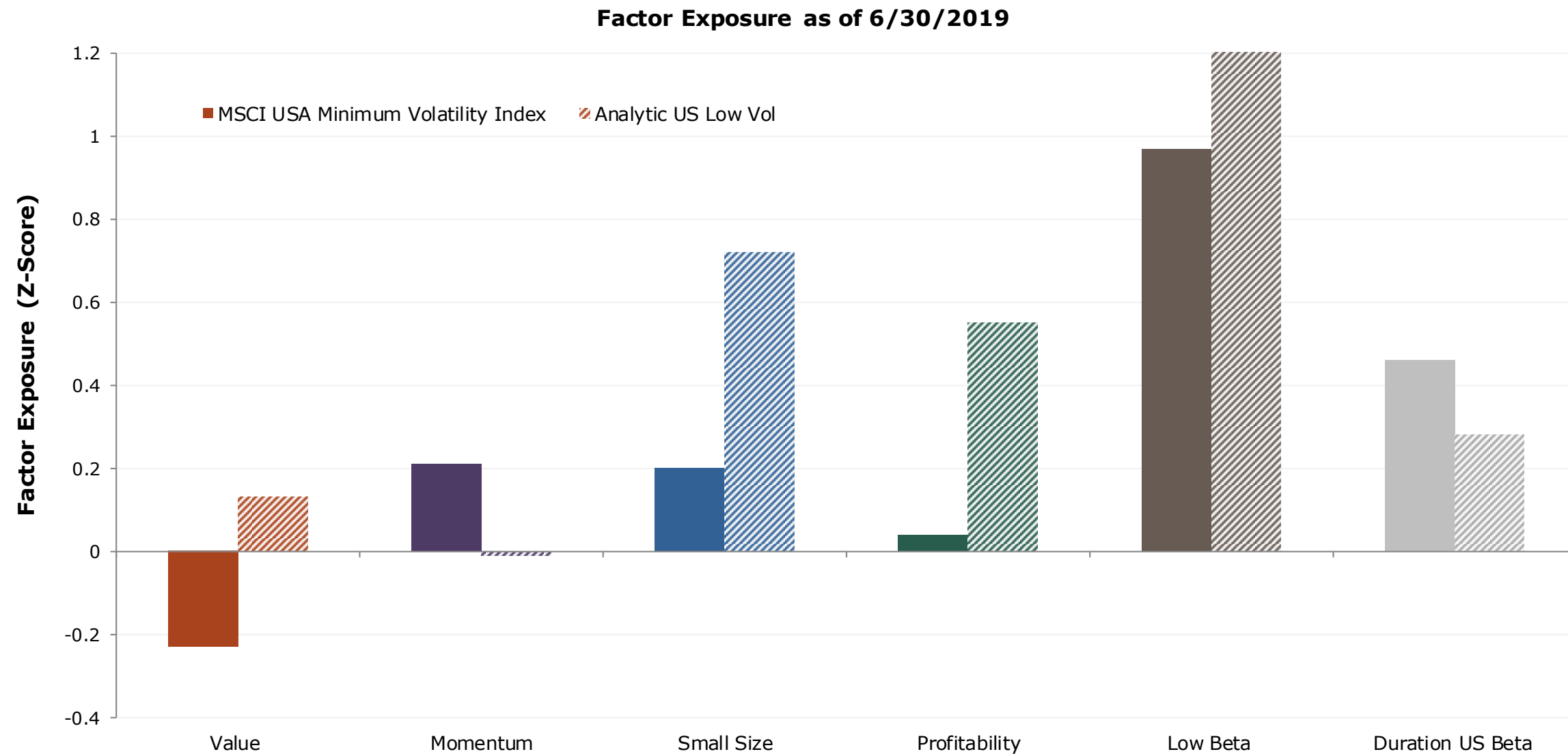
Low Volatility ETFs have around the same realized volatility as the regular index

Volatility of Low Vol Index relative to Parent Index



Source: Bloomberg. As of July 2019.

Low Vol ETF vs. multifactor portfolio



Source: Analytic Investors. Based on hypothetical data as described in Roger Clarke, Harindra de Silva, & Steven Thorley, 2017, "Pure Factor Portfolios and Multivariate Regression Analysis" Spring 2017 edition of the Journal of Portfolio Management.

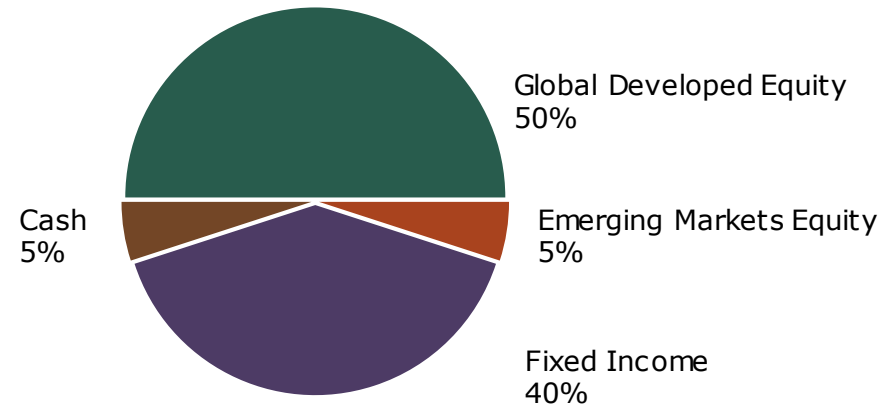
Deploying defensive equity strategies

Challenge: Desire for equity exposure with less severe drawdowns

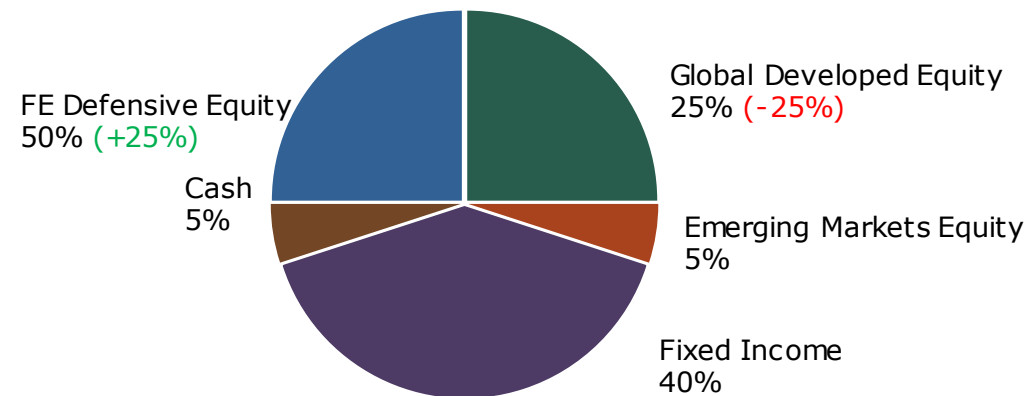
Solution: Replace passive management with Factor Enhanced Defensive Equity

- ✓ Preserves the benefits of passive management such as low turnover and low fees
- ✓ Can help lower portfolio volatility and improve downside protection

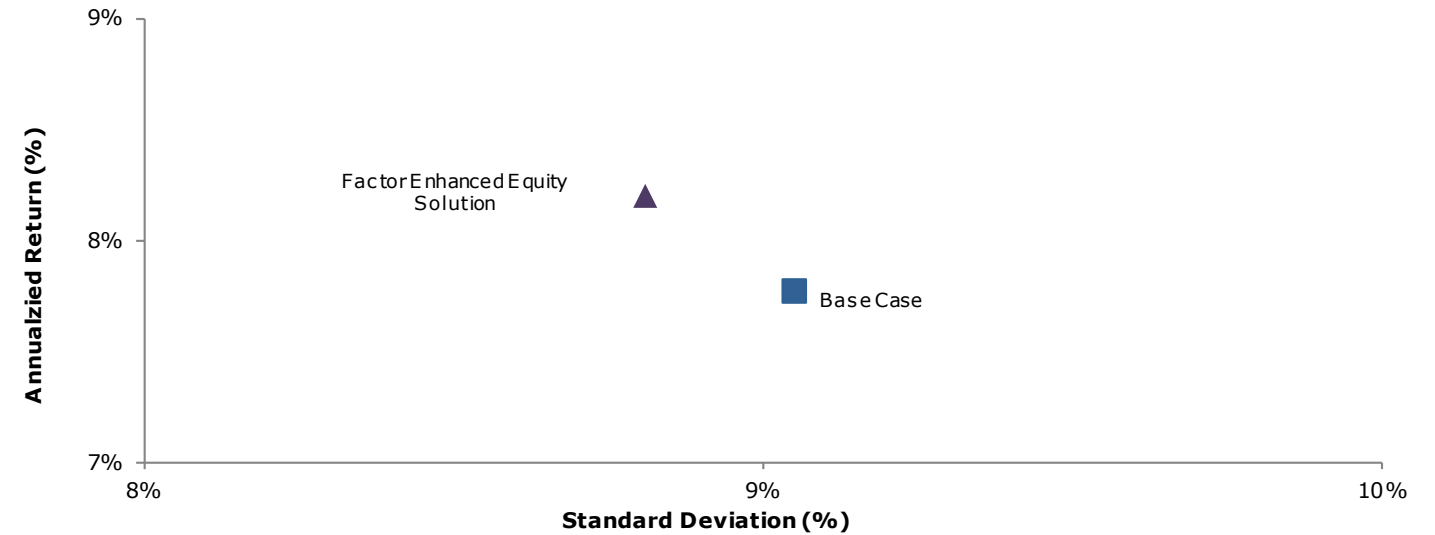
Base Case: Passive Index Exposure



Solution: Factor Enhanced Defensive Equity



Risk/Return
October 2002 – June 2019






	Passive Index Exposure	Factor Enhanced Solution	Impact
Return	7.27%	7.70%	+0.43%
Volatility	9.05%	8.81%	-8%
Risk-Adjusted Returns	0.80	0.87	+9%
Tracking Error	-	0.53%	
Max Drawdown	-32.08%	-30.93%	-1.15%

Source: FactSet. The Factor Enhanced Defensive Equity is a live index.

The hypothetical model is not maintained as a live composite or portfolio at Wells Fargo Asset Management. It is for illustrative purposes only. Hypothetical data does not represent actual performance and should not be interpreted as an indication of such. This data is based on knowledge that was available after the fact and thus with the benefit of hindsight. The broad market asset classes in the Base Case and Solutions are represented by the following proxies: Global Developed Equity: MSCI World Index; Emerging Markets Equity: MSCI Emerging Markets Equity Index; Fixed Income: FTSE WGBI; Cash: LIBOR – 3 Month. **Past performance is not a guarantee of future actual results.**

Takeaways

Why Smart Beta?	Why Analytic Investors?
<ul style="list-style-type: none"> ✓ Exposure to factors may improve the overall risk / return profile of a portfolio relative to a passive index ✓ Factors are flexible building blocks and can be used to create index replacement portfolios with low tracking error to targeted index or portfolios that offer improved downside protection ✓ Low total expense ratio and implementation costs 	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">  <p>Deep factor investing experience</p> </div> <div style="margin-bottom: 20px;">  <p>Grounded in academic research</p> </div> <div>  <p>Efficient factor exposure</p> </div> </div> <ul style="list-style-type: none"> • Over 20 years experience managing factor-based strategies • Manages more than \$20B in long-only, long/short, and market neutral factor strategies • Investment process supported by deep history of published academic research • Robust and transparent investment process that blends practical experience with academic research • Factor exposures are dynamically adjusted for risk and opportunity, resulting in a more balanced risk profile • Unique risk controls such as ESG and machine learning provide improved pure factor exposure by controlling stock-specific risk

Source: Analytic Investors. As of June 30, 2019.

Appendix

Performance

Factor Enhanced Global Equity (Hypothetical) - As of June 30, 2019

Inception since: 1/1/2002																	
Performance ITD	10.95	Standard deviation (%)	14.96														
MSCI World Index (Net) ITD	8.33	Tracking error	2.52														
Value-Added	2.62	Reporting currency	USD														
			Benchmark: MSCI World Index, Net														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1	Q2	Q3	Q4	YTD
2019																	
Factor Enhanced Global Equity	8.85	2.57	0.38	2.25	-6.29	7.06							12.07	2.58			
MSCI World Index, Net	7.78	3.01	1.31	3.55	-5.77	6.59							12.48	4.01			
Value Added	1.07	-0.44	-0.93	-1.30	-0.52	0.47							-0.41	-1.42			
2018																	
Factor Enhanced Global Equity	5.21	-3.89	-1.22	0.91	0.55	-1.35	2.86	1.14	-0.64	-8.01	0.16	-7.66	-0.12	0.09	3.36	-14.92	-12.09
MSCI World Index, Net	5.28	-4.14	-2.18	1.15	0.63	-0.05	3.12	1.24	0.56	-7.34	1.14	-7.60	-1.28	1.73	4.98	-13.42	-8.71
Value Added	-0.07	0.25	0.96	-0.24	-0.08	-1.30	-0.26	-0.10	-1.20	-0.67	-0.98	-0.06	1.16	-1.64	-1.62	-1.50	-3.38
2017																	
Factor Enhanced Global Equity	1.72	2.44	1.23	1.44	2.92	0.90	1.75	-0.15	2.43	1.77	2.09	2.23	5.48	5.34	4.06	6.21	22.81
MSCI World Index, Net	2.41	2.77	1.07	1.48	2.12	0.38	2.39	0.14	2.24	1.89	2.17	1.35	6.38	4.03	4.84	5.51	22.40
Value Added	-0.69	-0.33	0.16	-0.04	0.80	0.52	-0.64	-0.29	0.19	-0.12	-0.08	0.88	-0.90	1.31	-0.78	0.70	0.41
2016																	
Factor Enhanced Global Equity	-7.50	0.19	7.32	0.40	0.39	-2.76	4.34	0.36	0.49	-1.71	1.80	2.81	-0.54	-1.99	5.23	2.87	5.53
MSCI World Index, Net	-5.98	-0.74	6.79	1.58	0.56	-1.12	4.22	0.08	0.53	-1.94	1.44	2.39	-0.35	1.01	4.87	1.86	7.51
Value Added	-1.52	0.93	0.53	-1.18	-0.17	-1.64	0.12	0.28	-0.04	0.23	0.36	0.42	-0.19	-3.00	0.36	1.01	-1.98
2015																	
Factor Enhanced Global Equity	-1.22	6.53	-0.97	0.98	1.23	-2.26	2.48	-5.97	-2.36	7.77	0.01	-1.75	4.20	-0.08	-5.92	5.90	3.73
MSCI World Index, Net	-1.81	5.86	-1.57	2.35	0.34	-2.33	1.80	-6.62	-3.69	7.92	-0.50	-1.76	2.31	0.31	-8.45	5.50	-0.87
Value Added	0.59	0.67	0.60	-1.37	0.89	0.07	0.68	0.65	1.33	-0.15	0.51	0.01	1.89	-0.39	2.53	0.40	4.60
2014																	
Factor Enhanced Global Equity	-2.76	4.97	1.11	1.14	2.04	1.21	-1.69	2.92	-3.36	1.41	2.29	-0.18	3.21	4.44	-2.21	3.55	9.15
MSCI World Index, Net	-3.70	5.01	0.14	1.02	1.97	1.79	-1.60	2.20	-2.71	0.65	2.00	-1.61	1.26	4.86	-2.16	1.01	4.94
Value Added	0.94	-0.04	0.97	0.12	0.07	-0.58	-0.09	0.72	-0.65	0.76	0.29	1.43	1.95	-0.42	-0.05	2.54	4.21
2013																	
Factor Enhanced Global Equity	6.25	1.57	2.45	1.91	0.18	-2.80	5.84	-2.01	5.45	3.79	2.55	3.27	10.57	-0.77	9.37	9.92	31.90
MSCI World Index, Net	5.09	0.17	2.34	3.15	0.04	-2.46	5.26	-2.13	5.00	3.91	1.78	2.12	7.73	0.65	8.18	8.00	26.68
Value Added	1.16	1.40	0.11	-1.24	0.14	-0.34	0.58	0.12	0.45	-0.12	0.77	1.15	2.84	-1.42	1.19	1.92	5.22
2012																	
Factor Enhanced Global Equity	4.52	3.48	1.47	-0.40	-8.67	4.43	1.92	3.10	2.80	-0.19	2.39	2.15	9.75	-5.00	8.02	4.38	17.56
MSCI World Index, Net	5.02	4.88	1.29	-1.14	-8.63	5.10	1.29	2.54	2.75	-0.68	1.28	1.88	11.56	-5.07	6.71	2.49	15.83
Value Added	-0.50	-1.40	0.18	0.74	-0.04	-0.67	0.63	0.56	0.05	0.49	1.11	0.27	-1.81	0.07	1.31	1.89	1.73

Sources: Analytic Investors, FactSet.

Periods greater than one year are annualized. All returns in USD. The hypothetical models are not maintained as live composites or portfolios at Wells Fargo Asset Management. It is for illustrative purposes only. Hypothetical data does not represent actual performance and should not be interpreted as an indication of such. This data is based on knowledge that was available after the fact and thus with the benefit of hindsight. Parameters of the back tested model and back tested calendar year performance are provided in the Appendix. A live strategy is in existence but for regulatory reasons actual performance cannot until there is a complete 12 month record available.

Hypothetical past performance is not a guarantee of future results.

Performance

Factor Enhanced Global Equity (Hypothetical) - As of June 30, 2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1	Q2	Q3	Q4	YTD
Benchmark: MSCI World Index, Net																	
2011																	
FactorEnhanced Global Equity	2.76	3.29	1.01	4.80	-1.15	-1.25	-2.38	-6.79	-8.43	10.81	-1.98	0.06	7.22	2.30	-16.68	8.69	-0.67
MSCI World Index, Net	2.26	3.50	-0.99	4.25	-2.07	-1.58	-1.81	-7.05	-8.64	10.34	-2.44	-0.06	4.80	0.47	-16.61	7.59	-5.54
Value Added	0.50	-0.21	2.00	0.55	0.92	0.33	-0.57	0.26	0.21	0.47	0.46	0.12	2.42	1.83	-0.07	1.10	4.87
2010																	
FactorEnhanced Global Equity	-3.84	1.90	6.81	0.89	-9.34	-2.99	7.57	-3.61	10.44	4.23	-1.55	7.53	4.65	-11.27	14.51	10.35	17.34
MSCI World Index, Net	-4.13	1.41	6.19	0.01	-9.58	-3.43	8.11	-3.73	9.32	3.73	-2.16	7.35	3.24	-12.67	13.78	8.95	11.76
Value Added	0.29	0.49	0.62	0.88	0.24	0.44	-0.54	0.12	1.12	0.50	0.61	0.18	1.41	1.40	0.73	1.40	5.58
2009																	
FactorEnhanced Global Equity	-8.82	-9.78	7.75	11.66	8.99	-0.41	8.23	5.04	3.94	-2.37	3.28	2.41	-11.36	21.21	18.16	3.25	31.08
MSCI World Index, Net	-8.76	-10.24	7.54	11.22	9.06	-0.45	8.47	4.13	3.99	-1.78	4.09	1.80	-11.92	20.75	17.45	4.07	29.99
Value Added	-0.06	0.46	0.21	0.44	-0.07	0.04	-0.24	0.91	-0.05	-0.59	-0.81	0.61	0.56	0.46	0.71	-0.82	1.09
2008																	
FactorEnhanced Global Equity	-8.35	-0.28	-0.58	4.19	2.72	-7.69	-3.16	-1.65	-12.70	-20.15	-6.29	5.30	-9.14	-1.20	-16.85	-21.21	-41.19
MSCI World Index, Net	-7.64	-0.58	-0.96	5.26	1.52	-7.98	-2.44	-1.40	-11.89	-18.96	-6.47	3.21	-9.06	-1.66	-15.25	-21.77	-40.71
Value Added	-0.71	0.30	0.38	-1.07	1.20	0.29	-0.72	-0.25	-0.81	-1.19	0.18	2.09	-0.08	0.46	-1.60	0.56	-0.48
2007																	
FactorEnhanced Global Equity	1.76	1.46	3.37	4.77	2.93	-1.19	-2.86	-1.15	2.65	2.71	-5.30	-0.90	6.73	6.56	-1.43	-3.61	8.06
MSCI World Index, Net	1.18	-0.52	1.83	4.41	2.80	-0.77	-2.21	-0.08	4.76	3.07	-4.09	-1.29	2.50	6.51	2.36	-2.42	9.04
Value Added	0.58	1.98	1.54	0.36	0.13	-0.42	-0.65	-1.07	-2.11	-0.36	-1.21	0.39	4.23	0.05	-3.79	-1.19	-0.98
2006																	
FactorEnhanced Global Equity	5.85	0.43	2.97	3.80	-3.58	0.09	0.47	2.27	1.57	4.04	3.56	2.68	9.46	0.18	4.36	10.62	26.59
MSCI World Index, Net	4.47	-0.15	2.20	3.04	-3.42	-0.03	0.62	2.60	1.19	3.67	2.45	2.03	6.60	-0.51	4.47	8.37	20.07
Value Added	1.38	0.58	0.77	0.76	-0.16	0.12	-0.15	-0.33	0.38	0.37	1.11	0.65	2.86	0.69	-0.11	2.25	6.52
2005																	
FactorEnhanced Global Equity	-1.40	4.03	-1.15	-3.46	1.91	2.03	4.63	0.85	2.00	-3.34	3.53	3.04	1.39	0.38	7.63	3.12	12.96
MSCI World Index, Net	-2.25	3.17	-1.93	-2.19	1.78	0.87	3.49	0.75	2.60	-2.43	3.33	2.22	-1.10	0.41	6.98	3.06	9.49
Value Added	0.85	0.86	0.78	-1.27	0.13	1.16	1.14	0.10	-0.60	-0.91	0.20	0.82	2.49	-0.03	0.65	0.06	3.47
2004																	
FactorEnhanced Global Equity	1.48	2.58	0.66	-2.32	1.08	3.03	-3.07	0.69	2.77	3.39	7.11	4.28	4.78	1.72	0.31	15.49	23.47
MSCI World Index, Net	1.60	1.67	-0.66	-2.05	0.91	2.05	-3.26	0.44	1.89	2.45	5.25	3.82	2.62	0.87	-1.00	11.94	14.72
Value Added	-0.12	0.91	1.32	-0.27	0.17	0.98	0.19	0.25	0.88	0.94	1.86	0.46	2.16	0.85	1.31	3.55	8.75
2003																	
FactorEnhanced Global Equity	-2.00	-1.98	-0.04	10.03	6.81	2.22	1.63	2.71	1.04	6.91	2.08	6.07	-3.98	20.14	5.47	15.75	40.84
MSCI World Index, Net	-3.05	-1.75	-0.33	8.86	5.69	1.72	2.02	2.15	0.60	5.92	1.51	6.27	-5.06	17.04	4.84	14.26	33.11
Value Added	1.05	-0.23	0.29	1.17	1.12	0.50	-0.39	0.56	0.44	0.99	0.57	-0.20	1.08	3.10	0.63	1.49	7.73
2002																	
FactorEnhanced Global Equity	-1.38	-0.16	5.39	-1.79	1.40	-5.12	-8.70	-0.08	-10.37	7.47	6.53	-4.72	3.77	-5.52	-18.24	9.09	-12.55
MSCI World Index, Net	-3.04	-0.88	4.40	-3.40	0.17	-6.08	-8.44	0.17	-11.01	7.37	5.38	-4.86	0.34	-9.13	-18.38	7.64	-19.89
Value Added	1.66	0.72	0.99	1.61	1.23	0.96	-0.26	-0.25	0.64	0.10	1.15	0.14	3.43	3.61	0.14	1.45	7.34

Sources: Analytic Investors, FactSet.

Periods greater than one year are annualized. All returns in USD. The hypothetical models are not maintained as live composites or portfolios at Wells Fargo Asset Management. It is for illustrative purposes only. Hypothetical data does not represent actual performance and should not be interpreted as an indication of such. This data is based on knowledge that was available after the fact and thus with the benefit of hindsight. Parameters of the back tested model and back tested calendar year performance are provided in the Appendix. A live strategy is in existence but for regulatory reasons actual performance cannot until there is a complete 12 month record available.

Hypothetical past performance is not a guarantee of future results.

Factor Enhanced Global Equity simulation description

Backtest Parameters

- Long-only
- Factor Enhanced Alpha Model (includes Value, Quality, Momentum, Small Size, Low Volatility)
- MSCI World Universe
- Quarterly rebalance
- Tracking Error: ~2% relative to MSCI World Index
- Beta target: 1 relative to MSCI World Index
- Currency: USD
- Simulated account size: 100M

Constraints

- Sector: +/- 2% relative to the MSCI World Index
- Country: +/- 2% relative to the MSCI World Index
- Max security weight: Risk scaled holding up to 3% max relative to the index

Assumptions

- One-way transaction costs: 0.20%
- Point-in-time data

Hypothetical performance disclosure

Hypothetical performance is NOT an indicator of future actual results. The results are theoretical, reflect performance of a strategy not currently offered to investors and do not represent returns that any investor actually attained. Hypothetical performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve results similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual performance results subsequently achieved by any particular trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results.

Hypothetical returns are net of transaction costs and non-reclaimable withholding taxes, if any, are expressed in US dollars, and reflect the reinvestment of dividends and other earnings. Performance is inclusive of cash held in the underlying strategies and is calculated using a time-weighted return methodology that minimizes the impact of cash flows. As with any investment vehicle, there is always the potential for gains as well as the possibility of losses.

Disclosures

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