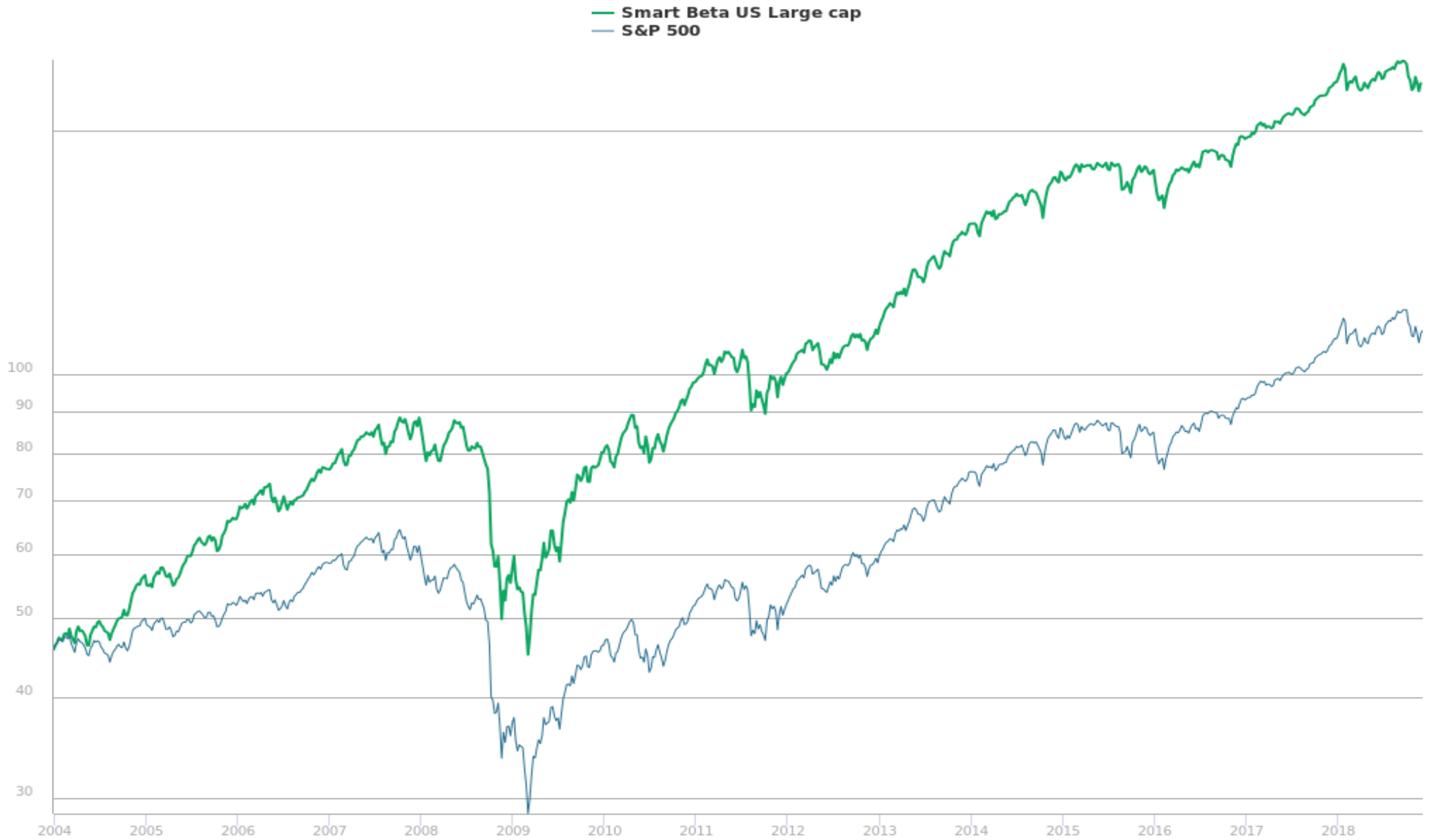


Trendrating Momentum Smart Beta US

Large cap

15 years report - November 2018

Chart



Key facts

Performance

	Trendrating	Benchmark	Difference
Cumulative	+405.76%	+148.74%	+257.02%
Annualized	+11.07%	+6.08%	+4.99%
Yearly average	+12.80%	+7.53%	+5.27%
Max consecutive positive weeks	8	10	-2

Risk

	Trendrating	Benchmark	Difference
Max drawdown	-50.59%	-56.78%	+6.18%
Average yearly drawdown	-13.76%	-13.59%	-0.17%
Monthly standard deviation	5.38%	5.18%	+0.20%
Max consecutive negative weeks	5	5	0

Key ratios

	Trendrating	Benchmark	Difference
One way yearly average turnover	147%		
Sharpe ratio	0.7090	0.4269	+0.2821
Sterling ratio	0.6090	0.3250	+0.2839
Sortino ratio	1.4139	0.7989	+0.6150
Beta	1.0295		
Tracking error	0.0405		
Information ratio	0.3589		
Treynor ratio	0.2335		
% positive weeks	65.36%	64.80%	+0.56%

Analytics

Historical statistics

Year	Yearly performance			Max drawdown			Monthly return stdDev			One way turnover
	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value	
2004	23.71%	9.22%	14.49%	-6.76%	-8.16%	1.40%	3.40%	3.18%	-0.22%	117.25%
2005	16.35%	3.00%	13.35%	-7.45%	-7.17%	-0.28%	3.40%	2.92%	-0.49%	156.04%
2006	15.85%	13.62%	2.23%	-9.81%	-7.70%	-2.11%	3.31%	2.85%	-0.47%	149.12%
2007	14.37%	3.53%	10.84%	-10.13%	-10.09%	-0.04%	4.60%	4.52%	-0.08%	126.23%
2008	-33.65%	-38.49%	4.84%	-48.20%	-48.76%	0.56%	11.46%	11.59%	0.14%	332.82%
2009	37.33%	23.45%	13.87%	-27.77%	-27.62%	-0.15%	8.69%	7.73%	-0.95%	232.60%
2010	22.78%	12.78%	9.99%	-15.78%	-15.99%	0.22%	5.71%	5.12%	-0.59%	152.12%
2011	2.33%	0.00%	2.34%	-20.47%	-19.39%	-1.08%	6.80%	6.60%	-0.20%	166.88%
2012	12.97%	13.41%	-0.43%	-10.71%	-9.94%	-0.78%	3.76%	3.60%	-0.15%	163.61%
2013	36.61%	29.60%	7.01%	-6.21%	-5.76%	-0.45%	3.53%	3.17%	-0.36%	83.60%
2014	14.18%	11.39%	2.79%	-8.40%	-7.40%	-1.00%	3.43%	3.22%	-0.21%	111.33%
2015	0.91%	-0.73%	1.64%	-10.79%	-12.35%	1.56%	4.29%	4.40%	0.10%	130.69%
2016	9.10%	9.54%	-0.43%	-10.58%	-10.51%	-0.07%	3.71%	3.72%	0.01%	165.81%
2017	18.11%	19.42%	-1.31%	-3.13%	-2.80%	-0.33%	2.12%	1.90%	-0.22%	76.52%
2018	1.09%	3.24%	-2.15%	-10.22%	-10.17%	-0.04%	4.01%	4.40%	0.39%	109.52%
Annualized	11.07%	6.08%	4.99%	-13.76%	-13.59%	-0.17%	4.81%	4.59%	-0.22%	147.00%

Year to date performance and risk

Month	Monthly performance			Max drawdown			Monthly return stdDev		
	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value
Jan 2018	4.39%	5.62%	-1.23%	-1.89%	-1.76%	-0.13%	2.60%	2.52%	-0.07%
Feb 2018	-4.51%	-3.89%	-0.61%	-8.18%	-8.60%	0.42%	6.80%	7.46%	0.66%
Mar 2018	-1.08%	-2.69%	1.61%	-6.03%	-7.12%	1.09%	4.97%	5.62%	0.66%

Month	Monthly performance			Max drawdown			Monthly return stdDev		
	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value
Apr 2018	0.30%	0.27%	0.03%	-2.22%	-2.73%	0.51%	4.53%	4.86%	0.33%
May 2018	1.31%	2.16%	-0.85%	-1.50%	-1.59%	0.09%	2.93%	2.99%	0.06%
Jun 2018	0.90%	0.48%	0.41%	-2.70%	-3.13%	0.43%	2.42%	2.59%	0.17%
Jul 2018	3.14%	3.60%	-0.46%	-1.03%	-1.53%	0.50%	2.15%	2.39%	0.23%
Aug 2018	1.79%	3.03%	-1.23%	-1.50%	-1.40%	-0.09%	2.30%	2.01%	-0.29%
Sep 2018	-0.01%	0.43%	-0.44%	-1.37%	-1.03%	-0.34%	1.49%	1.55%	0.06%
Oct 2018	-6.91%	-6.94%	0.03%	-9.16%	-9.72%	0.56%	5.62%	6.32%	0.70%
Nov 2018	2.32%	1.79%	0.54%	-5.50%	-6.44%	0.94%	4.61%	5.28%	0.67%

Holdings

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	PPG	Ppg Industries	US	Specialty Chemicals	
0.34%	FISV	Fiserv	US	Financial Administration	
0.34%	FOXA	Twenty-first Century Fox	US	Broadcasting & Entertainment	
0.02%	GWW	Ww Grainger	US	Industrial Suppliers	
0.02%	URI	United Rentals	US	Business Support Services	
0.34%	DXC	Dxc Technology	US	Computer Services	
0.02%	ITW	Illinois Tool Works	US	Industrial Machinery	
0.02%	IBM	IBM	US	Computer Services	
0.02%	GPS	Gap	US	Apparel Retailers	
0.34%	BDX	Becton Dickinson	US	Medical Supplies	
0.02%	JBHT	J.b.hunt Transport Services	US	Trucking	
0.34%	USB	Us Bancorp	US	Banks	
0.34%	BLL	Ball	US	Containers & Packaging	
0.34%	ADBE	Adobe	US	Software	
0.02%	SCHW	Charles Schwab	US	Investment Services	
0.02%	AIG	American International	US	Full Line Insurance	
0.02%	COF	Capital One Financial	US	Consumer Finance	
0.02%	SWK	Stanley Black & Decker	US	Durable Household Products	
0.02%	HLT	Hilton Worldwide	US	Hotels	
0.34%	VAR	Varian Medical Systems	US	Medical Equipment	
0.34%	APC	Anadarko Petroleum	US	Exploration & Production	
0.34%	PH	Parker-hannifin	US	Diversified Industrials	
0.34%	YUM	Yum Brands	US	Restaurants & Bars	
0.02%	KEYS	Keysight Technologies	US	Electronic Equipment	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	GOOGL	Alphabet	US	Internet	
0.34%	EXPD	Expeditors International Of Washington	US	Delivery Services	
0.02%	CFG	Citizens Financial	US	Banks	
0.02%	APTV	Aptiv	US	Auto Parts	
0.34%	PKI	Perkinelmer	US	Electronic Equipment	
0.02%	JEF	Jefferies Financial	US	Food Products	
0.34%	AFL	Aflac	US	Life Insurance	
0.02%	JCI	Johnson Controls International	US	Business Support Services	
0.34%	FAST	Fastenal	US	Industrial Suppliers	
0.34%	DOV	Dover	US	Industrial Machinery	
0.34%	CNP	Centerpoint Energy	US	Multi-utilities	
0.34%	CAT	Caterpillar	US	Commercial Vehicles & Trucks	
0.02%	PNR	Pentair	US	Industrial Machinery	
0.02%	MAS	Masco	US	Building Materials & Fixtures	
0.02%	NLSN	Nielsen	US	Media Agencies	
0.34%	PLD	Prologis	US	Industrial & Office REITs	
0.02%	TDG	Transdigm	US	Aerospace	
0.34%	NEE	Nextera Energy	US	Conventional Electricity	
0.34%	WELL	Welltower	US	Specialty REITs	
0.34%	MTD	Mettler Toledo International	US	Electronic Equipment	
0.34%	MKC	Mccormick	US	Food Products	
0.02%	CMI	Cummins	US	Commercial Vehicles & Trucks	
0.02%	KIM	Kimco Realty	US	Retail REITs	
0.34%	CRM	Salesforce.com	US	Software	
0.02%	NKTR	Nektar Therapeutics	US	Biotechnology	
0.34%	AMD	Advanced Micro Devices	US	Semiconductors	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	COG	Cabot Oil & Gas	US	Exploration & Production	
0.34%	SRE	Sempra Energy	US	Multi-utilities	
0.02%	FLIR	Flir Systems	US	Defense	
0.02%	PKG	Packaging Corp Of America	US	Containers & Packaging	
0.34%	GLW	Corning	US	Telecommunications Equipment	
0.02%	DVN	Devon Energy	US	Exploration & Production	
0.34%	CHRW	C.h.robinson Worldwide	US	Trucking	
0.02%	XEC	Cimarex Energy	US	Exploration & Production	
0.34%	RL	Ralph Lauren	US	Clothing & Accessories	
0.34%	UNH	Unitedhealth	US	Health Care Providers	
0.02%	FDX	Fedex	US	Delivery Services	
0.02%	FBHS	Fortune Brands Home & Security	US	Furnishings	
0.34%	CI	Cigna	US	Health Care Providers	
0.34%	ALXN	Alexion Pharmaceuticals	US	Biotechnology	
0.02%	DWDP	Dowdupont	US	Commodity Chemicals	
0.34%	AXP	American Express	US	Consumer Finance	
0.34%	ECL	Ecolab	US	Specialty Chemicals	
0.02%	CERN	Cerner	US	Software	
0.02%	FITB	Fifth Third Bancorp	US	Banks	
0.34%	PAYX	Paychex	US	Financial Administration	
0.34%	MNST	Monster Beverage	US	Soft Drinks	
0.34%	NCLH	Norwegian Cruise Line	US	Recreational Services	
0.02%	SYF	Synchrony Financial	US	Consumer Finance	
0.02%	L	Loews	US	Property & Casualty Insurance	
0.34%	PG	Procter & Gamble	US	Nondurable Household Products	
0.02%	ROK	Rockwell Automation	US	Industrial Machinery	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	CSCO	Cisco Systems	US	Telecommunications Equipment	
0.34%	MET	Metlife	US	Life Insurance	
0.02%	SLB	Schlumberger	US	Oil Equipment & Services	
0.34%	TXT	Textron	US	Aerospace	
0.02%	SJM	J.m. Smucker	US	Food Products	
0.34%	HPQ	Hp	US	Computer Hardware	
0.02%	SYZ	Sysco	US	Food Retailers & Wholesalers	
0.34%	ESRX	Express Scripts	US	Health Care Providers	
0.34%	KMX	Carmax	US	Specialty Retailers	
0.02%	MAT	Mattel	US	Toys	
0.02%	SRCL	Stericycle	US	Waste & Disposal Services	
0.02%	SLG	SI Green Realty	US	Industrial & Office REITs	
0.34%	ESS	Essex Property Trust	US	Residential REITs	
0.02%	NFX	Newfield Exploration	US	Exploration & Production	
0.02%	PHM	Pultegroup	US	Home Construction	
0.34%	HAS	Hasbro	US	Toys	
0.34%	M	Macy's	US	Broadline Retailers	
0.02%	BBY	Best Buy	US	Specialty Retailers	
0.34%	IFF	International Flavors & Fragrances	US	Specialty Chemicals	
0.34%	DE	Deere	US	Commercial Vehicles & Trucks	
0.34%	FL	Foot Locker	US	Apparel Retailers	
0.34%	TSCO	Tractor Supply	US	Specialty Retailers	
0.34%	CSX	Csx	US	Railroads	
0.02%	BK	Bank Of New York Mellon	US	Asset Managers	
0.34%	ICE	Intercontinental Exchange	US	Investment Services	
0.34%	PFE	Pfizer	US	Pharmaceuticals	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	UHS	Universal Health Services	US	Health Care Providers	
0.34%	PEP	Pepsico	US	Soft Drinks	
0.34%	DHR	Danaher	US	Diversified Industrials	
0.02%	LEG	Leggett & Platt	US	Furnishings	
0.34%	AGN	Allergan	US	Pharmaceuticals	
0.34%	MOS	The Mosaic	US	Specialty Chemicals	
0.34%	SCG	Scana	US	Multi-utilities	
0.34%	ETN	Eaton	US	Diversified Industrials	
0.02%	CCL	Carnival	US	Recreational Services	
0.02%	NFLX	Netflix	US	Specialty Retailers	
0.02%	IPGP	Ipg Photonics	US	Electronic Equipment	
0.02%	PCAR	Paccar	US	Commercial Vehicles & Trucks	
0.02%	GE	General Electric	US	Diversified Industrials	
0.34%	CXO	Concho Resources	US	Exploration & Production	
0.34%	CHTR	Charter Communications	US	Broadcasting & Entertainment	
0.34%	GILD	Gilead Sciences	US	Biotechnology	
0.02%	BR	Broadridge Financial Solutions	US	Financial Administration	
0.02%	NTRS	Northern Trust	US	Asset Managers	
0.34%	FRT	Federal Realty Investment Trust	US	Retail REITs	
0.34%	RHT	Red Hat	US	Software	
0.34%	ADM	Archer Daniels Midland	US	Food Products	
0.02%	WU	The Western Union	US	Consumer Finance	
0.34%	DISCA	Discovery	US	Broadcasting & Entertainment	
0.02%	BEN	Franklin Resources	US	Asset Managers	
0.34%	ZBH	Zimmer Biomet	US	Medical Equipment	
0.34%	AES	Aes	US	Conventional Electricity	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	GPN	Global Payments	US	Financial Administration	
0.02%	TSS	Total System Services	US	Financial Administration	
0.02%	WRK	Westrock	US	Containers & Packaging	
0.34%	XOM	Exxon Mobil	US	Integrated Oil & Gas	
0.02%	ADI	Analog Devices	US	Semiconductors	
0.34%	XLNX	Xilinx	US	Semiconductors	
0.34%	SNA	Snap-on	US	Industrial Machinery	
0.02%	PRU	Prudential Financial	US	Life Insurance	
0.34%	JKHY	Jack Henry & Associates	US	Financial Administration	
0.02%	STZ	Constellation Brands	US	Distillers & Vintners	
0.34%	PSX	Phillips 66	US	Integrated Oil & Gas	
0.34%	IQV	Iqvia	US	Biotechnology	
0.02%	CAH	Cardinal Health	US	Pharmaceuticals	
0.34%	VRTX	Vertex Pharmaceuticals	US	Biotechnology	
0.02%	BF.B	Brown-forman	US	Distillers & Vintners	
0.34%	TRIP	Tripadvisor	US	Travel & Tourism	
0.02%	PSA	Public Storage	US	Specialty REITs	
0.02%	SPGI	S&p; Global	US	Specialty Finance	
0.34%	WM	Waste Management	US	Waste & Disposal Services	
0.02%	TPR	Tapestry	US	Clothing & Accessories	
0.34%	HP	Helmerich & Payne	US	Oil Equipment & Services	
0.02%	HAL	Halliburton	US	Oil Equipment & Services	
0.02%	EMN	Eastman Chemical	US	Commodity Chemicals	
0.34%	HRB	H.& R.block	US	Specialized Consumer Services	
0.34%	CCI	Crown Castle International	US	Specialty REITs	
0.34%	COO	Cooper Companies	US	Medical Supplies	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	ACN	Accenture	US	Business Support Services	
0.02%	MCK	Mckesson	US	Drug Retailers	
0.02%	IP	International Paper	US	Paper	
0.34%	RTN	Raytheon	US	Defense	
0.34%	XEL	Xcel Energy	US	Conventional Electricity	
0.34%	SYK	Stryker	US	Medical Equipment	
0.34%	MAR	Marriott International	US	Hotels	
0.34%	AMGN	Amgen	US	Biotechnology	
0.02%	RE	Everest Re	US	Reinsurance	
0.02%	DLTR	Dollar Tree	US	Specialty Retailers	
0.02%	GT	Goodyear Tire & Rubber	US	Tires	
0.02%	PM	Philip Morris International	US	Tobacco	
0.02%	MSCI	Msci	US	Specialty Finance	
0.34%	AVB	Avalonbay Communities	US	Residential REITs	
0.34%	LNT	Alliant Energy	US	Conventional Electricity	
0.02%	OXY	Occidental Petroleum	US	Exploration & Production	
0.34%	ORCL	Oracle	US	Software	
0.34%	IR	Ingersoll-rand	US	Industrial Machinery	
0.02%	ED	Consolidated Edison	US	Conventional Electricity	
0.02%	SWKS	Skyworks Solutions	US	Semiconductors	
0.34%	MA	Mastercard	US	Consumer Finance	
0.34%	BKNG	Booking	US	Travel & Tourism	
0.02%	CELG	Celgene	US	Biotechnology	
0.34%	RCL	Royal Caribbean Cruises	US	Recreational Services	
0.02%	NBL	Noble Energy	US	Exploration & Production	
0.34%	HES	Hess	US	Integrated Oil & Gas	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	BAX	Baxter International	US	Medical Supplies	
0.02%	INCY	Incyte	US	Biotechnology	
0.34%	HRL	Hormel Foods	US	Food Products	
0.34%	ABMD	Abiomed	US	Medical Equipment	
0.02%	KHC	The Kraft Heinz	US	Food Products	
0.34%	HII	Huntington Ingalls Industries	US	Defense	
0.34%	VNO	Vornado Realty Trust	US	Industrial & Office REITs	
0.34%	MPC	Marathon Petroleum	US	Integrated Oil & Gas	
0.34%	UDR	Udr	US	Residential REITs	
0.34%	BIIB	Biogen	US	Biotechnology	
0.02%	AMAT	Applied Materials	US	Semiconductors	
0.34%	PGR	Progressive	US	Property & Casualty Insurance	
0.34%	PPL	Ppl	US	Conventional Electricity	
0.02%	HOG	Harley-davidson	US	Automobiles	
0.34%	MCD	Mcdonald's	US	Restaurants & Bars	
0.34%	NKE	Nike	US	Footwear	
0.34%	EOG	Eog Resources	US	Exploration & Production	
0.02%	SEE	Sealed Air	US	Containers & Packaging	
0.34%	AAP	Advance Auto Parts	US	Specialty Retailers	
0.02%	LH	Laboratory Corp Of America	US	Health Care Providers	
0.34%	CTL	Centurylink	US	Fixed Line Telecommunications	
0.34%	K	Kellogg	US	Food Products	
0.34%	ABC	Amerisourcebergen	US	Drug Retailers	
0.34%	HD	The Home Depot	US	Home Improvement Retailers	
0.02%	MMM	3m	US	Diversified Industrials	
0.02%	FTI	Technipfmc	US	Oil Equipment & Services	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	PNW	Pinnacle West Capital	US	Conventional Electricity	
0.02%	APH	Amphenol	US	Electrical Components & Equipment	
0.34%	AEE	Ameren	US	Multi-utilities	
0.34%	FLR	Fluor	US	Heavy Construction	
0.02%	WMB	Williams Companies	US	Pipelines	
0.34%	HPE	Hewlett Packard Enterprise	US	Computer Services	
0.02%	PNC	Pnc Financial Services	US	Banks	
0.34%	ETR	Entergy	US	Conventional Electricity	
0.02%	MHK	Mohawk Industries	US	Furnishings	
0.34%	CHD	Church & Dwight	US	Nondurable Household Products	
0.02%	TXN	Texas Instruments	US	Semiconductors	
0.34%	AJG	Arthur J.gallagher	US	Property & Casualty Insurance	
0.34%	HSIC	Henry Schein	US	Medical Supplies	
0.34%	XYL	Xylem	US	Industrial Machinery	
0.02%	EVRG	Evergy	US	Conventional Electricity	
0.02%	MCO	Moody's	US	Specialty Finance	
0.34%	KR	Kroger	US	Food Retailers & Wholesalers	
0.34%	TRV	Travelers Companies	US	Property & Casualty Insurance	
0.02%	NWL	Newell Brands	US	Durable Household Products	
0.02%	FB	Facebook	US	Internet	
0.02%	PWR	Quanta Services	US	Heavy Construction	
0.34%	DUK	Duke Energy	US	Multi-utilities	
0.34%	BA	Boeing	US	Aerospace	
0.34%	ATVI	Activision Blizzard	US	Toys	
0.34%	CMG	Chipotle Mexican Grill	US	Restaurants & Bars	
0.34%	HUM	Humana	US	Health Care Providers	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	SYMC	Symantec	US	Software	
0.02%	EFX	Equifax	US	Specialty Finance	
0.34%	IPG	Interpublic Group Of Companies	US	Media Agencies	
0.02%	EBAY	Ebay	US	Specialized Consumer Services	
0.34%	ADS	Alliance Data Systems	US	Financial Administration	
0.34%	DVA	Davita	US	Health Care Providers	
0.02%	BBT	Bb&t;	US	Banks	
0.02%	REGN	Regeneron Pharmaceuticals	US	Biotechnology	
0.34%	JEC	Jacobs Engineering	US	Heavy Construction	
0.02%	ABBV	Abbvie	US	Pharmaceuticals	
0.34%	QCOM	Qualcomm	US	Semiconductors	
0.02%	CBOE	Cboe Global Markets	US	Investment Services	
0.34%	RMD	Resmed	US	Medical Equipment	
0.34%	AMT	American Tower	US	Specialty REITs	
0.34%	MO	Altria	US	Tobacco	
0.34%	ORLY	O'reilly Automotive	US	Specialty Retailers	
0.02%	F	Ford Motor	US	Automobiles	
0.02%	KLAC	Kla-tencor	US	Semiconductors	
0.34%	ES	Eversource Energy	US	Conventional Electricity	
0.34%	CDNS	Cadence Design Systems	US	Software	
0.34%	TJX	Tjx Companies	US	Apparel Retailers	
0.02%	WLTW	Willis Towers Watson	US	Business Support Services	
0.34%	EQR	Equity Residential	US	Residential REITs	
0.34%	EXC	Exelon	US	Conventional Electricity	
0.34%	INTU	Intuit	US	Software	
0.34%	ALLE	Allegion	US	Electrical Components & Equipment	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	MAA	Mid-america Apartment Communities	US	Residential REITs	
0.34%	KSS	Kohl's	US	Apparel Retailers	
0.02%	CB	Chubb	US	Property & Casualty Insurance	
0.34%	HOLX	Hologic	US	Medical Supplies	
0.02%	TEL	Te Connectivity	US	Electrical Components & Equipment	
0.34%	EIX	Edison International	US	Conventional Electricity	
0.34%	O	Realty Income	US	Retail REITs	
0.02%	KEY	Keycorp	US	Banks	
0.34%	MDT	Medtronic	US	Medical Equipment	
0.34%	ARNC	Arconic	US	Diversified Industrials	
0.34%	VTR	Ventas	US	Specialty REITs	
0.34%	ANTM	Anthem	US	Health Care Providers	
0.34%	MRK	Merck	US	Pharmaceuticals	
0.02%	INFO	Ihs Markit	US	Specialty Finance	
0.34%	OMC	Omnicom	US	Media Agencies	
0.34%	JNJ	Johnson & Johnson	US	Pharmaceuticals	
0.02%	LRCX	Lam Research	US	Semiconductors	
0.02%	FCX	Freeport-mcmoran	US	Nonferrous Metals	
0.02%	EXPE	Expedia	US	Travel & Tourism	
0.02%	TROW	T Rowe Price	US	Asset Managers	
0.34%	FMC	Fmc	US	Specialty Chemicals	
0.34%	ROL	Rollins	US	Specialized Consumer Services	
0.34%	FIS	Fidelity National Information Services	US	Financial Administration	
0.34%	AAPL	Apple	US	Computer Hardware	
0.02%	CPB	Campbell Soup	US	Food Products	
0.02%	CVX	Chevron	US	Integrated Oil & Gas	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	APA	Apache	US	Exploration & Production	
0.02%	CL	Colgate-palmolive	US	Personal Products	
0.02%	AOS	A.o.smith	US	Building Materials & Fixtures	
0.34%	PCG	Pg&e;	US	Conventional Electricity	
0.02%	CMA	Comerica	US	Banks	
0.34%	DAL	Delta Air Lines Inc (de)	US	Airlines	
0.02%	EQIX	Equinix	US	Specialty REITs	
0.34%	CBS	Cbs	US	Broadcasting & Entertainment	
0.34%	CLX	Clorox	US	Nondurable Household Products	
0.02%	BAC	Bank Of America	US	Banks	
0.02%	VMC	Vulcan Materials Co (holding Co)	US	Building Materials & Fixtures	
0.02%	CAG	Conagra Brands	US	Food Products	
0.02%	OKE	Oneok	US	Pipelines	
0.02%	WHR	Whirlpool	US	Durable Household Products	
0.34%	ALGN	Align Technology	US	Medical Supplies	
0.34%	AWK	American Water Works	US	Water	
0.34%	PYPL	Paypal	US	Financial Administration	
0.02%	ANET	Arista Networks	US	Internet	
0.02%	DGX	Quest Diagnostics	US	Health Care Providers	
0.02%	NEM	Newmont Mining	US	Gold Mining	
0.02%	AMG	Affiliated Managers	US	Asset Managers	
0.02%	PBCT	People's United Financial	US	Banks	
0.02%	RF	Regions Financial	US	Banks	
0.34%	A	Agilent Technologies	US	Electronic Equipment	
0.02%	AAL	American Airlines	US	Airlines	
0.34%	MSI	Motorola Solutions	US	Telecommunications Equipment	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	CINF	Cincinnati Financial	US	Property & Casualty Insurance	
0.34%	CNC	Centene	US	Health Care Providers	
0.02%	WDC	Western Digital	US	Computer Hardware	
0.34%	NI	Nisource	US	Gas Distribution	
0.02%	GD	General Dynamics	US	Defense	
0.34%	DLR	Digital Realty Trust	US	Industrial & Office REITs	
0.34%	HCP	Hcp	US	Specialty REITs	
0.34%	JWN	Nordstrom	US	Apparel Retailers	
0.02%	UNM	Unum	US	Life Insurance	
0.34%	MRO	Marathon Oil	US	Exploration & Production	
0.34%	CTAS	Cintas	US	Business Support Services	
0.34%	WEC	Wec Energy	US	Multi-utilities	
0.02%	MGM	Mgm Resorts International	US	Gambling	
0.34%	LMT	Lockheed Martin	US	Defense	
0.02%	HST	Host Hotels & Resorts	US	Hotel & Lodging REITs	
0.34%	JPM	Jpmorgan Chase	US	Banks	
0.02%	BHGE	Baker Hughes, A Ge	US	Oil Equipment & Services	
0.34%	KO	Coca-cola	US	Soft Drinks	
0.02%	TMK	Torchmark	US	Life Insurance	
0.34%	SBAC	Sba Communications	US	Specialty REITs	
0.34%	LLY	Eli Lilly	US	Pharmaceuticals	
0.34%	NTAP	Netapp	US	Computer Hardware	
0.34%	CME	Cme	US	Investment Services	
0.02%	XRAY	Dentsply Sirona	US	Medical Supplies	
0.02%	VLO	Valero Energy	US	Exploration & Production	
0.34%	AON	Aon	US	Insurance Brokers	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	T	At&t;	US	Fixed Line Telecommunications	
0.34%	TGT	Target	US	Broadline Retailers	
0.34%	FOX	Twenty-first Century Fox	US	Broadcasting & Entertainment	
0.34%	DFS	Discover Financial Services	US	Consumer Finance	
0.02%	ARE	Alexandria Real Estate Equities	US	Industrial & Office REITs	
0.02%	TSN	Tyson Foods	US	Food Products	
0.02%	XRX	Xerox	US	Business Support Services	
0.02%	STI	Suntrust Banks	US	Banks	
0.34%	DG	Dollar General	US	Specialty Retailers	
0.34%	FTNT	Fortinet	US	Software	
0.34%	VRSN	Verisign	US	Computer Services	
0.02%	DHI	D.r. Horton	US	Home Construction	
0.02%	STX	Seagate Technology	US	Computer Hardware	
0.02%	LIN	Linde	US	Commodity Chemicals	
0.02%	SO	Southern	US	Conventional Electricity	
0.34%	HON	Honeywell International	US	Diversified Industrials	
0.34%	LOW	Lowe's Companies	US	Home Improvement Retailers	
0.34%	ILMN	Illumina	US	Biotechnology	
0.34%	ALB	Albemarle	US	Specialty Chemicals	
0.02%	WYNN	Wynn Resorts	US	Gambling	
0.02%	ETFC	Etrade Financial	US	Investment Services	
0.02%	ZION	Zions Bancorporation Na	US	Banks	
0.02%	CBRE	Cbre	US	Real Estate Services	
0.34%	SHW	Sherwin-williams	US	Building Materials & Fixtures	
0.02%	WY	Weyerhaeuser	US	Specialty REITs	
0.02%	TIF	Tiffany	US	Specialty Retailers	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	WBA	Walgreens Boots Alliance	US	Drug Retailers	
0.34%	NRG	Nrg Energy	US	Conventional Electricity	
0.34%	AEP	American Electric Power	US	Conventional Electricity	
0.34%	CPRT	Copart	US	Specialized Consumer Services	
0.34%	IT	Gartner	US	Computer Services	
0.02%	COTY	Coty	US	Personal Products	
0.02%	BXP	Boston Properties	US	Industrial & Office REITs	
0.34%	ABT	Abbott Laboratories	US	Pharmaceuticals	
0.02%	MTB	M&t; Bank	US	Banks	
0.34%	FLS	Flowserve	US	Industrial Machinery	
0.34%	VFC	Vf	US	Clothing & Accessories	
0.02%	INTC	Intel	US	Semiconductors	
0.34%	APD	Air Products & Chemicals	US	Commodity Chemicals	
0.02%	BMJ	Bristol-myers Squibb	US	Pharmaceuticals	
0.34%	CTXS	Citrix Systems	US	Software	
0.02%	NOV	National Oilwell Varco	US	Oil Equipment & Services	
0.34%	SPG	Simon Property	US	Retail REITs	
0.02%	MAC	Macerich	US	Retail REITs	
0.34%	EXR	Extra Space Storage	US	Specialty REITs	
0.02%	WFC	Wells Fargo	US	Banks	
0.02%	EA	Electronic Arts	US	Toys	
0.02%	PVH	Pvh	US	Clothing & Accessories	
0.34%	HCA	Hca Healthcare	US	Health Care Providers	
0.34%	AKAM	Akamai Technologies	US	Internet	
0.02%	LNC	Lincoln National	US	Life Insurance	
0.02%	GS	Goldman Sachs	US	Investment Services	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	QRVO	Qorvo	US	Semiconductors	
0.02%	AMZN	Amazon.com	US	Broadline Retailers	
0.02%	AMP	Ameriprise Financial	US	Investment Services	
0.34%	VZ	Verizon Communications	US	Fixed Line Telecommunications	
0.34%	DIS	Walt Disney	US	Broadcasting & Entertainment	
0.02%	MU	Micron Technology	US	Semiconductors	
0.02%	PFG	Principal Financial	US	Life Insurance	
0.34%	BSX	Boston Scientific	US	Medical Equipment	
0.02%	GM	General Motors	US	Automobiles	
0.34%	RSG	Republic Services	US	Waste & Disposal Services	
0.34%	FLT	Fleetcor Technologies	US	Financial Administration	
0.34%	ADP	Automatic Data Processing	US	Financial Administration	
0.34%	V	Visa	US	Consumer Finance	
0.34%	COP	Conocophillips	US	Integrated Oil & Gas	
0.02%	PXD	Pioneer Natural Resources	US	Exploration & Production	
0.34%	WCG	Wellcare Health Plans	US	Health Care Providers	
0.02%	NUE	Nucor	US	Iron & Steel	
0.34%	UAA	Under Armour	US	Clothing & Accessories	
0.34%	VRSK	Verisk Analytics	US	Business Support Services	
0.34%	FFIV	F5 Networks	US	Telecommunications Equipment	
0.02%	LB	L Brands	US	Apparel Retailers	
0.02%	HBAN	Huntington Bancshares	US	Banks	
0.02%	IRM	Iron Mountain	US	Specialty REITs	
0.34%	EMR	Emerson Electric	US	Electronic Equipment	
0.02%	BHF	Brighthouse Financial	US	Life Insurance	
0.34%	KMI	Kinder Morgan	US	Pipelines	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	WAT	Waters	US	Electronic Equipment	
0.34%	ZTS	Zoetis	US	Pharmaceuticals	
0.02%	MLM	Martin Marietta Materials	US	Building Materials & Fixtures	
0.34%	MMC	Marsh & McLennan Cos	US	Insurance Brokers	
0.34%	ADSK	Autodesk	US	Software	
0.34%	FE	Firstenergy	US	Conventional Electricity	
0.34%	AIV	Apartment Investment & Management	US	Residential REITs	
0.34%	VIAB	Viacom	US	Broadcasting & Entertainment	
0.34%	ISRG	Intuitive Surgical	US	Medical Equipment	
0.34%	GPC	Genuine Parts	US	Auto Parts	
0.02%	ANSS	Ansys	US	Software	
0.34%	HSY	The Hershey	US	Food Products	
0.34%	DRE	Duke Realty	US	Industrial & Office REITs	
0.02%	GIS	General Mills	US	Food Products	
0.34%	TTWO	Take-two Interactive Software	US	Toys	
0.34%	CMS	Cms Energy	US	Conventional Electricity	
0.34%	DTE	Dte Energy	US	Conventional Electricity	
0.34%	MDLZ	Mondelez International	US	Food Products	
0.34%	FTV	Fortive	US	Diversified Industrials	
0.34%	COST	Costco Wholesale	US	Broadline Retailers	
0.34%	HFC	Hollyfrontier	US	Exploration & Production	
0.02%	CTSH	Cognizant Technology Solutions	US	Computer Services	
0.02%	STT	State Street	US	Asset Managers	
0.34%	IDXX	Idexx Laboratories	US	Medical Supplies	
0.02%	C	Citigroup	US	Banks	
0.34%	ROST	Ross Stores	US	Apparel Retailers	

Security					
Weight	Ticker	Name	Market	Sector	
0.34%	BRK.B	Berkshire Hathaway	US	Reinsurance	
0.34%	PEG	Public Service Enterprise	US	Conventional Electricity	
0.34%	UNP	Union Pacific	US	Railroads	
0.34%	DISCK	Discovery	US	Broadcasting & Entertainment	
0.02%	KMB	Kimberly-clark	US	Personal Products	
0.34%	UAL	United Continental	US	Airlines	
0.34%	ALK	Alaska Air	US	Airlines	
0.34%	REG	Regency Centers	US	Retail REITs	
0.34%	JNPR	Juniper Networks	US	Telecommunications Equipment	
0.02%	BLK	Blackrock	US	Asset Managers	
0.02%	BWA	Borgwarner	US	Auto Parts	
0.34%	GRMN	Garmin	US	Consumer Electronics	
0.02%	TAP	Molson Coors Brewing	US	Brewers	
0.02%	DISH	Dish Network	US	Broadcasting & Entertainment	
0.34%	TWTR	Twitter	US	Internet	
0.34%	D	Dominion Energy	US	Conventional Electricity	
0.02%	HBI	Hanesbrands	US	Clothing & Accessories	
0.34%	SNPS	Synopsys	US	Software	
0.02%	HIG	The Hartford Financial Services	US	Full Line Insurance	
0.02%	RHI	Robert Half International	US	Business Training & Employment Agencies	
0.02%	IVZ	Invesco	US	Asset Managers	
0.02%	GOOG	Alphabet	US	Internet	
0.34%	CF	Cf Industries	US	Specialty Chemicals	
0.02%	RJF	Raymond James Financial	US	Investment Services	
0.34%	UA	Under Armour	US	Clothing & Accessories	
0.34%	CMCSA	Comcast	US	Broadcasting & Entertainment	

Security					
Weight	Ticker	Name	Market	Sector	
0.02%	LEN	Lennar	US	Home Construction	
0.02%	UPS	United Parcel Service	US	Delivery Services	
0.34%	MSFT	Microsoft	US	Software	
0.34%	DRI	Darden Restaurants	US	Restaurants & Bars	
0.34%	NVDA	Nvidia	US	Semiconductors	
0.34%	WMT	Walmart	US	Broadline Retailers	
0.02%	LYB	Lyondellbasell Industries	US	Commodity Chemicals	
0.34%	LUV	Southwest Airlines	US	Airlines	
0.02%	KSU	Kansas City Southern	US	Railroads	
0.02%	AIZ	Assurant	US	Life Insurance	
0.34%	UTX	United Technologies	US	Aerospace	
0.34%	CVS	Cvs Health	US	Drug Retailers	
0.02%	MYL	Mylan	US	Pharmaceuticals	
0.34%	LLL	L3 Technologies	US	Defense	
0.02%	PRGO	Perrigo	US	Pharmaceuticals	
0.02%	AVY	Avery Dennison	US	Specialty Chemicals	
0.34%	NSC	Norfolk Southern	US	Railroads	
0.02%	MCHP	Microchip Technology	US	Semiconductors	
0.02%	NWSA	News	US	Publishing	
0.02%	LKQ	Lkq	US	Auto Parts	
0.34%	EL	Estee Lauder Companies	US	Personal Products	
0.34%	ROP	Roper Technologies	US	Electronic Equipment	
0.34%	NDAQ	Nasdaq	US	Investment Services	
0.34%	TMO	Thermo Fisher Scientific	US	Medical Equipment	
0.02%	NOC	Northrop Grumman	US	Defense	
0.02%	AVGO	Broadcom	US	Semiconductors	

Security				
Weight	Ticker	Name	Market	Sector
0.02%	MS	Morgan Stanley	US	Investment Services
0.02%	NWS	News	US	Publishing
0.34%	SBUX	Starbucks	US	Restaurants & Bars
0.34%	AME	Ametek	US	Electronic Equipment
0.34%	ULTA	Ulta Beauty	US	Specialty Retailers
0.34%	HRS	Harris	US	Telecommunications Equipment
0.34%	AZO	Autozone	US	Specialty Retailers
0.02%	SIVB	Svb Financial	US	Banks
0.02%	ALL	Allstate	US	Property & Casualty Insurance
0.34%	EW	Edwards Lifesciences	US	Medical Supplies
0.02%	KORS	Michael Kors	US	Clothing & Accessories

Notes

The investment universe is consisting of all the stocks included in the reference Benchmark.

Trendrating measures price momentum using a four grades rating A,B,C,D.

The **Smart Beta US Large cap** overweights the exposure in "A" rated stocks and underweights the exposure in all the others.

Every month the strategy rebalances the exposure across all the stocks in order to always maximize the weightings on the best Momentum stocks.

The **Smart Beta US Large cap** was launched on January 2013 since Trendrating is live with our customers.

Data prior to the launch date is back-tested data (i.e. performance over that time period had the strategy existed). There are frequently material differences between back-tested performance and actual results. Past performance -- whether actual or back-tested -- is no indication or guarantee of future performance

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