

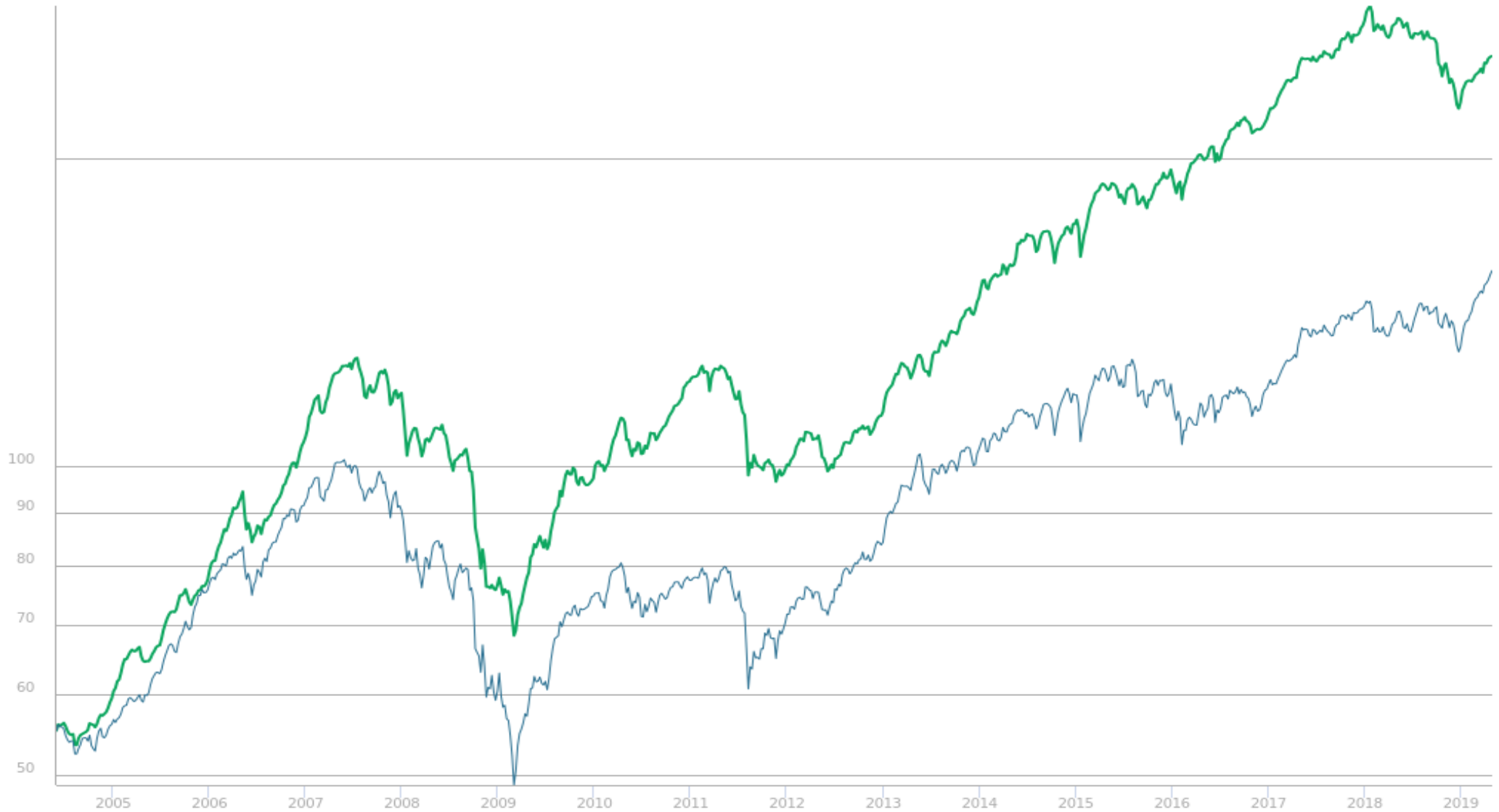
# Trendrating Momentum Smart Beta Switzerland

15 years report - May 2019

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# Chart

— Smart Beta Switzerland  
— SPI



## Key facts

### Performance

	Trendrating	Benchmark	Difference
<b>Cumulative</b>	<b>+356.13%</b>	<b>+182.01%</b>	<b>+174.13%</b>
<b>Annualized</b>	<b>+10.33%</b>	<b>+6.95%</b>	<b>+3.38%</b>
Yearly average	+11.84%	+8.10%	+3.73%
Max consecutive positive weeks	12	9	+3

### Risk

	Trendrating	Benchmark	Difference
Max drawdown	-47.28%	-53.25%	+5.97%
Average yearly drawdown	-11.91%	-13.79%	+1.87%
Monthly standard deviation	3.04%	4.62%	-1.58%
Max consecutive negative weeks	6	6	0

### Key ratios

	Trendrating	Benchmark	Difference
One way yearly average turnover	149%		
Sharpe ratio	0.7845	0.5107	+0.2737
Sterling ratio	0.5824	0.3679	+0.2145
Sortino ratio	1.5114	1.0690	+0.4424
Beta	0.8000		
Tracking error	0.0903		
Information ratio	0.1274		
Treynor ratio	0.2396		
% positive weeks	67.04%	62.01%	+5.03%

# 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	8.23%	1.76%	6.47%	-5.81%	-7.50%	1.69%	1.49%	3.00%	1.51%	63.71%
2005	31.09%	35.61%	-4.52%	-4.66%	-3.43%	-1.23%	1.72%	2.55%	0.84%	124.13%
2006	35.69%	20.67%	15.03%	-12.20%	-12.09%	-0.10%	2.65%	3.51%	0.86%	108.27%
2007	11.97%	-0.05%	12.03%	-11.55%	-14.57%	3.02%	3.26%	4.26%	1.00%	107.68%
2008	-35.47%	-34.05%	-1.42%	-37.36%	-38.53%	1.16%	4.85%	9.37%	4.52%	296.03%
2009	27.03%	23.18%	3.85%	-13.45%	-24.36%	10.91%	3.36%	5.41%	2.05%	212.88%
2010	24.06%	2.92%	21.14%	-10.57%	-14.17%	3.60%	2.96%	4.05%	1.09%	108.90%
2011	-17.21%	-7.72%	-9.49%	-23.76%	-27.36%	3.60%	3.64%	5.76%	2.12%	207.31%
2012	12.01%	17.72%	-5.71%	-10.49%	-8.40%	-2.09%	2.46%	3.15%	0.69%	246.04%
2013	30.13%	24.60%	5.53%	-7.18%	-13.04%	5.86%	2.62%	3.75%	1.13%	110.80%
2014	18.26%	13.00%	5.26%	-8.58%	-8.99%	0.42%	2.73%	3.10%	0.37%	121.34%
2015	13.19%	2.68%	10.51%	-11.05%	-14.65%	3.60%	3.58%	5.60%	2.02%	154.79%
2016	11.98%	-1.41%	13.39%	-7.65%	-14.41%	6.76%	2.97%	4.46%	1.49%	115.28%
2017	23.27%	19.92%	3.36%	-3.17%	-3.88%	0.70%	2.05%	2.48%	0.44%	82.90%
2018	-16.18%	-8.57%	-7.61%	-21.44%	-13.15%	-8.29%	3.15%	3.90%	0.75%	171.19%
2019	11.32%	19.38%	-8.06%	-1.69%	-2.08%	0.39%	1.79%	2.45%	0.66%	71.76%
Annualized	10.33%	6.95%	3.38%	-11.91%	-13.79%	1.87%	2.83%	4.18%	1.35%	151.00%

## 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 2019	5.56%	6.96%	-1.40%	-0.49%	-1.50%	1.01%	1.84%	2.94%	1.10%
Feb 2019	0.98%	4.28%	-3.30%	-1.51%	-1.60%	0.09%	1.76%	2.57%	0.82%

Month	Monthly performance			Max drawdown			Monthly return stdDev		
	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value	Trendrating	Benchmark	Added value
Mar 2019	1.32%	2.52%	-1.20%	-1.69%	-2.08%	0.39%	1.83%	2.47%	0.64%
Apr 2019	3.07%	4.39%	-1.33%	-0.87%	-0.75%	-0.12%	1.71%	1.63%	-0.08%

# Holdings

Security					
Weight	Ticker	Name	Market	Sector	
0.08%	BAER	Julius Baer	CH	Banks	
1.19%	BEKN	Berner Kantonalbank	CH	Banks	
0.08%	CON	Conzzeta	CH	Industrial Machinery	
0.08%	TOHN	Tornos	CH	Industrial Machinery	
0.08%	ARBN	Arbonia	CH	Durable Household Products	
0.08%	METN	Metall Zug	CH	Durable Household Products	
1.19%	CICN	Cicor Technologies	CH	Electrical Components & Equipment	
1.19%	DOKA	Dormakaba	CH	Electronic Equipment	
0.08%	CALN	Calida	CH	Clothing & Accessories	
0.08%	LEON	Leonteq	CH	Investment Services	
0.08%	FREN	Fundamenta Real Estate	CH	Real Estate Holding & Development	
0.08%	STLN	Schmolz + Bickenbach	CH	Iron & Steel	
0.08%	BOSN	Bossard	CH	Building Materials & Fixtures	
1.19%	ZUGN	Zug Estates	CH	Real Estate Holding & Development	
0.08%	OBSN	Obseva	CH	Biotechnology	
1.19%	PWTN	Panalpina World Transport	CH	Delivery Services	
1.19%	LAND	Landis+gyr	CH	Electronic Equipment	
1.19%	ODHN	Orascom Development	CH	Real Estate Holding & Development	
1.19%	ALSN	Also	CH	Computer Hardware	
1.19%	ADEN	Adecco	CH	Business Training & Employment Agencies	
0.08%	IMPN	Implenia	CH	Heavy Construction	
1.19%	GIVN	Givaudan	CH	Specialty Chemicals	
0.08%	DUFN	Dufry	CH	Specialty Retailers	
0.08%	GEBN	Geberit	CH	Building Materials & Fixtures	

Security					
Weight	Ticker	Name	Market	Sector	
0.08%	MED	Medartis	CH	Medical Equipment	
0.08%	MBTN	Meyer Burger Technology	CH	Industrial Machinery	
0.08%	RIEN	Rieter	CH	Industrial Machinery	
0.08%	BRKN	Burkhalter	CH	Heavy Construction	
0.08%	BSKP	Basler Kantonalbank	CH	Banks	
0.08%	TAMN	Tamedia	CH	Publishing	
1.19%	TEMN	Temenos	CH	Software	
0.08%	BKW	Bkw	CH	Conventional Electricity	
0.08%	PEAN	Peach Property	CH	Real Estate Holding & Development	
1.19%	TECN	Tecan	CH	Medical Equipment	
1.19%	HIAG	Hiag Immobilien	CH	Real Estate Holding & Development	
0.08%	STGN	Starrag	CH	Industrial Machinery	
0.08%	AMS	Ams	CH	Semiconductors	
0.08%	KUD	Kudelski	CH	Software	
0.08%	PEHN	Private Equity	CH	Equity Investments	
1.19%	EMMN	Emmi	CH	Food Products	
0.08%	PNHO	Poenina	CH	Heavy Construction	
1.19%	IREN	Investis	CH	Real Estate Services	
1.19%	SOON	Sonova	CH	Medical Equipment	
1.19%	VATN	Valiant	CH	Banks	
0.08%	LOGN	Logitech International	CH	Computer Hardware	
0.08%	CFR	Compagnie Financiere Richemont	CH	Clothing & Accessories	
0.08%	BLIN	Bfw Liegenschaften	CH	Real Estate Holding & Development	
0.08%	MOZN	Mobilezone	CH	Specialty Retailers	
1.19%	LECN	Leclanche	CH	Nondurable Household Products	
0.08%	ABBN	Abb	CH	Industrial Machinery	

Security					
Weight	Ticker	Name	Market	Sector	
0.08%	UHR	The Swatch	CH	Clothing & Accessories	
1.19%	JFN	Jungfraubahn	CH	Travel & Tourism	
0.08%	KOMN	Komax	CH	Industrial Machinery	
0.08%	KLIN	Klingelberg	CH	Industrial Machinery	
1.19%	BUCN	Bucher Industries	CH	Commercial Vehicles & Trucks	
0.08%	GAV	Carlo Gavazzi	CH	Electronic Equipment	
0.08%	SUN	Sulzer	CH	Industrial Machinery	
0.08%	DAE	Daetwyler	CH	Diversified Industrials	
0.08%	UBSG	Ubs	CH	Banks	
0.08%	KNIN	Kuehne + Nagel International	CH	Marine Transportation	
1.19%	ZG	Zuger Kantonalbank	CH	Banks	
1.19%	SCMN	Swisscom	CH	Fixed Line Telecommunications	
0.08%	MCHN	Mch	CH	Business Support Services	
1.19%	BLKB	Basellandschaftliche Kantonalbank	CH	Banks	
0.08%	LLQ	Lalique	CH	Personal Products	
1.19%	KARN	Kardex	CH	Industrial Machinery	
0.08%	COTN	Comet	CH	Electrical Components & Equipment	
0.08%	SRCG	Sunrise Communications	CH	Fixed Line Telecommunications	
1.19%	INRN	Interroll	CH	Industrial Machinery	
1.19%	SKIN	Cassiopea	CH	Pharmaceuticals	
0.08%	VBSN	Ivf Hartmann	CH	Medical Supplies	
0.08%	BCHN	Burckhardt Compression	CH	Industrial Machinery	
0.08%	VZN	Vz	CH	Specialty Finance	
1.19%	VARN	Varia Us Properties	CH	Real Estate Holding & Development	
0.08%	BOBNN	Bobst	CH	Industrial Machinery	
1.19%	PLAN	Plazza	CH	Real Estate Holding & Development	



Security					
Weight	Ticker	Name	Market	Sector	
0.08%	MIKN	Mikron	CH	Industrial Machinery	
0.08%	HREN	Romande Energie	CH	Conventional Electricity	
0.08%	FI-N	Georg Fischer	CH	Industrial Machinery	
0.08%	CHAM	Cham	CH	Real Estate Holding & Development	
0.08%	CEVA	Ceva Logistics	CH	Transportation Services	
0.08%	VONN	Vontobel	CH	Banks	
0.08%	BSLN	Basilea Pharmaceutica	CH	Biotechnology	
0.08%	ARYN	Aryzta	CH	Food Products	
1.19%	OERL	Oc Oerlikon	CH	Industrial Machinery	
0.08%	MOLN	Molecular Partners	CH	Biotechnology	
0.08%	BARN	Barry Callebaut	CH	Food Products	
1.19%	VET	Vetropack	CH	Containers & Packaging	
0.08%	SIGN	Sig Combibloc	CH	Containers & Packaging	
0.08%	ORON	Orior	CH	Food Products	
0.08%	TIBN	Titlisbahnen N	CH	Travel & Tourism	
1.19%	LLBN	Liechtensteinische Landesbank	CH	Banks	
0.08%	MTG	Meier Tobler	CH	Industrial Machinery	
0.08%	BANB	Bachem	CH	Pharmaceuticals	
0.08%	ADVN	Adval Tech	CH	Industrial Machinery	
0.08%	PGHN	Partners	CH	Asset Managers	
0.08%	EFGN	Efg International	CH	Banks	
1.19%	OFN	Orell Fuessli	CH	Publishing	
0.08%	IDIA	Idorsia	CH	Biotechnology	
1.19%	WARN	Wartec Invest	CH	Real Estate Holding & Development	
0.08%	CLN	Clariant	CH	Specialty Chemicals	
1.19%	GRKP	Graubuendner Kantonalbank	CH	Banks	

Security					
Weight	Ticker	Name	Market	Sector	
1.19%	CFT	Tradition Finance	CH	Investment Services	
0.08%	LUKN	Luzerner Kantonalbank	CH	Banks	
1.19%	SIKA	Sika	CH	Building Materials & Fixtures	
1.19%	STMN	Straumann	CH	Medical Supplies	
0.08%	SENS	Sensirion	CH	Electrical Components & Equipment	
1.19%	BEAN	Belimo	CH	Building Materials & Fixtures	
0.08%	SFSN	Sfs	CH	Diversified Industrials	
1.19%	ZURN	Zurich Insurance	CH	Full Line Insurance	
0.08%	SAHN	Schaffner	CH	Electronic Equipment	
1.19%	NOVN	Novartis	CH	Pharmaceuticals	
1.19%	LONN	Lonza	CH	Biotechnology	
1.19%	GUR	Gurit	CH	Specialty Chemicals	
1.19%	HUBN	Huber + Suhner	CH	Telecommunications Equipment	
0.08%	FTON	Feintool International	CH	Industrial Machinery	
1.19%	BALN	Baloise-holding	CH	Full Line Insurance	
1.19%	BION	Bb Biotech	CH	Biotechnology	
0.08%	AEVS	Aevis Victoria	CH	Health Care Providers	
1.19%	ROL	Von Roll	CH	Electrical Components & Equipment	
0.08%	SQN	Swissquote	CH	Investment Services	
1.19%	LMN	Lastminute.com	CH	Travel & Tourism	
1.19%	LISP	Lindt & Spruengli	CH	Food Products	
1.19%	BCVN	Banque Cantonale Vaudoise	CH	Banks	
1.19%	SCHN	Schindler	CH	Industrial Machinery	
1.19%	GLKBN	Glarner Kantonalbank	CH	Banks	
0.08%	EVE	Evolva	CH	Biotechnology	
1.19%	LISN	Lindt & Spruengli	CH	Food Products	

Security					
Weight	Ticker	Name	Market	Sector	
0.08%	AUTN	Autoneum	CH	Auto Parts	
1.19%	CPHN	Cph Chemie & Papier	CH	Paper	
1.19%	ISN	Intershop	CH	Real Estate Holding & Development	
0.08%	ASCN	Ascom	CH	Telecommunications Equipment	
1.19%	EMSN	Ems-chemie	CH	Specialty Chemicals	
1.19%	ALLN	Allreal	CH	Real Estate Holding & Development	
1.19%	BCGE	Banque Cantonale De Geneve	CH	Banks	
1.19%	SCHP	Schindler	CH	Industrial Machinery	
0.08%	VPBN	Vp Bank	CH	Banks	
0.08%	SPSN	Swiss Prime Site	CH	Real Estate Holding & Development	
0.08%	KTMI	Ktm Industries	CH	Automobiles	
0.08%	SNBN	Swiss National Bank	CH	Banks	
1.19%	ROG	Roche	CH	Pharmaceuticals	
0.08%	YPSN	Ypsomed	CH	Medical Supplies	
0.08%	GALE	Galenica	CH	Drug Retailers	
0.08%	VIFN	Vifor Pharma	CH	Pharmaceuticals	
0.08%	SGKN	Cantonal Bank Of Saint Gall	CH	Banks	
0.08%	GAM	Gam	CH	Asset Managers	
1.19%	WKBN	Walliser Kantonalbank	CH	Banks	
1.19%	MOBN	Mobimo	CH	Real Estate Holding & Development	
1.19%	VACN	Vat	CH	Industrial Machinery	
1.19%	IFCN	Inficon	CH	Industrial Machinery	
0.08%	SFZN	Siegfried	CH	Pharmaceuticals	
1.19%	TKBP	Thurgauer Kantonalbank	CH	Banks	
0.08%	HOCN	Hochdorf	CH	Food Products	
0.08%	CSGN	Credit Suisse	CH	Banks	

Security					
Weight	Ticker	Name	Market	Sector	
0.08%	UBXN	U-blox	CH	Semiconductors	
1.19%	LEHN	Lem	CH	Electrical Components & Equipment	
1.19%	LHN	Lafargeholcim	CH	Building Materials & Fixtures	
1.19%	PARG	Pargesa	CH	Specialty Finance	
1.19%	SREN	Swiss Re	CH	Reinsurance	
0.08%	POLN	Polyphor	CH	Biotechnology	
1.19%	HBLN	Hypothekarbank Lenzburg	CH	Banks	
1.19%	SGSN	Sgs	CH	Business Support Services	
1.19%	FORN	Forbo	CH	Building Materials & Fixtures	
1.19%	LINN	Bank Linth LlB	CH	Banks	
0.08%	BELL	Bell Food	CH	Food Products	
0.08%	ROSE	Zur Rose	CH	Drug Retailers	
0.08%	DKSH	Dksh	CH	Business Support Services	
0.08%	SANN	Santhera Pharmaceuticals	CH	Biotechnology	
0.08%	VAHN	Vaudoise Versicherungen	CH	Full Line Insurance	
1.19%	HELN	Helvetia	CH	Full Line Insurance	
0.08%	FHZN	Flughafen Zuerich	CH	Transportation Services	
0.08%	VALN	Valora	CH	Food Retailers & Wholesalers	
1.19%	PSPN	Psp Swiss Property	CH	Real Estate Holding & Development	
0.08%	BCJ	Banque Cantonale Du Jura	CH	Banks	
1.19%	SLHN	Swiss Life	CH	Life Insurance	
0.08%	APGN	Apg Sga	CH	Media Agencies	
0.08%	CLTN	Coltene	CH	Medical Supplies	
0.08%	COPN	Cosmo Pharmaceuticals	CH	Pharmaceuticals	
0.08%	NWRN	Newron Pharmaceuticals	CH	Biotechnology	
0.08%	SWTQ	Schweiter Technologies	CH	Industrial Machinery	

Security				
Weight	Ticker	Name	Market	Sector
1.19%	NESN	Nestle	CH	Food Products
0.08%	BBN	Bellevue	CH	Investment Services
0.08%	PM	Phoenix Mecano	CH	Electrical Components & Equipment
1.19%	CMBN	Cembra Money Bank	CH	Banks
0.08%	ZEHN	Zehnder	CH	Building Materials & Fixtures
0.08%	UHRN	The Swatch	CH	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 Switzerland** 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 Switzerland** 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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