



Volatility Index on the SMI[®] (VSMI[®])

About the Volatility Index on the SMI[®]

The VSMI[®] model was introduced on 20 April 2005 and has the objective of making it possible to trade pure volatility. The index is replicated by a portfolio that responds not to price fluctuations, but to changes in volatility alone. This is accomplished through use of variances – or volatility squared. The VSMI[®] applies implicit variances to all Eurex-traded SMI[®] options of the same duration. Apart from the subindices for specific durations, the VSMI[®] – as the duration-independent main index – is determined on the basis of a fixed residual term of 30 days. The calculation method is the same as that used for the VSTOXX[®] and VDAX-NEW[®]. It can be downloaded for reference purposes via the SIX Swiss Exchange Website:

www.six-swiss-exchange.com/indices/strategy_indices/vsmi_en.html

The VSMI[®] as well as any given subindex are calculated on every trading day of the Eurex between the hours of 8:50 am and 5:30 pm. Continuous calculation begins only once all of the required volatility subindices have been calculated. The subindex is then recalculated and published every minute.

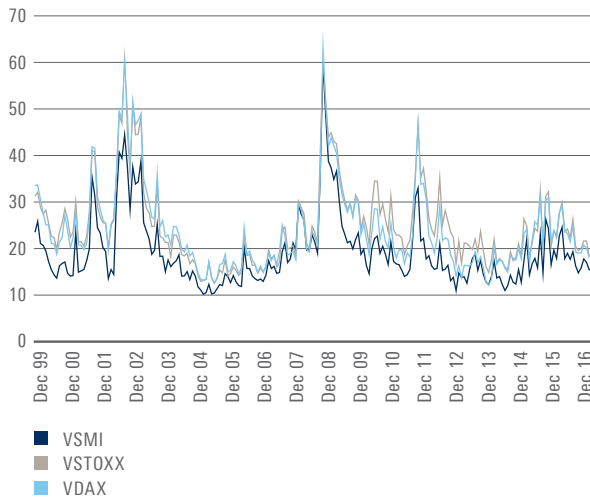
How to interpret the VSMI[®]?

The VSMI[®] is a tool that enables investors to monitor anticipated fluctuations in the SMI[®]. VSMI[®] readings reflect volatility in annualised percentage points. For example, if the SMI[®] currently stands at 6,000 points and the VSMI[®] has a value of 25%, this indicates that the futures market expects the SMI[®] to fluctuate within a range of 5,570 to 6,430 points over the next 30 days.

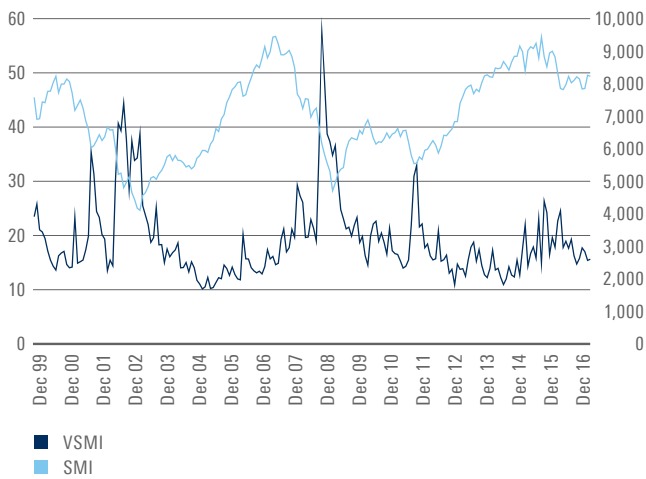
The formal for calculating the fluctuation range of the SMI[®] over the next 30 days is as follows: SMI[®] index level x square root of (30 : 365) x VSMI[®] in % per year

$$\text{Sample calculation: } 6,000 \times \sqrt{\frac{30}{365}} \times 0.25 = 430$$

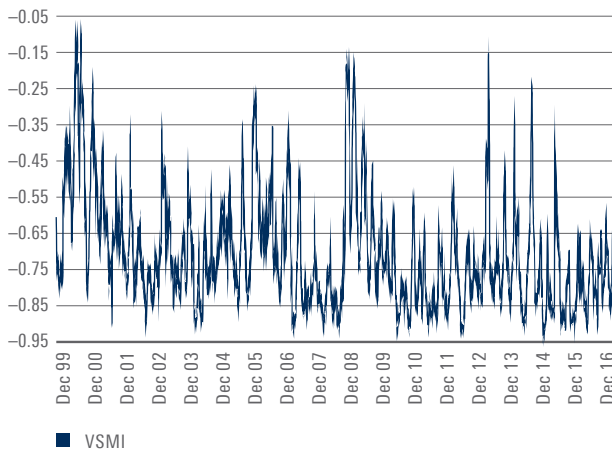
30-day correlation of VSMI® and SMI® (daily basis)



Historical comparison of VSMI® and SMI®



30-day correlation of VSMI® and SMI® (daily basis)



VSMI® index levels

Year	Close	High	Low	Low
2016	15.45	34.56	12.23	17.23
2015	17.68	44.44	12.26	17.73
2014	17.27	25.26	9.85	13.33
2013	13.73	21.28	11.44	14.08
2012	14.54	22.60	10.62	15.14
2011	17.55	44.46	13.38	21.29
2010	17.01	30.27	13.11	18.26
2009	18.54	46.94	16.49	26.49
2008	38.63	87.25	17.13	31.59
2007	19.52	30.62	12.02	17.51
2006	12.73	25.39	10.38	14.08
2005	12.46	15.92	9.24	11.53
2004	11.55	22.56	10.35	15.03
2003	14.82	41.94	14.54	24.80
2002	37.41	53.04	13.33	28.55
2001	23.19	43.82	12.29	20.77
2000	14.48	25.87	12.56	17.72
1999	23.33	37.00	16.86	23.76
Since introduction		87.25	9.24	20.84

Quick Facts

	VSMI®
Definition	Volatility index on the SMI®
Symbol	VSMI®
ISIN	CH0019900841
Securtiy no.	1990084
Reuters Ric	.V3X
Bloomberg ticker	V3X
Historical data	Since 4 January 1999
Launch	20.04.2005
Publication	Price update every minute
Index-based products	Eurex futures, structured products

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All used data are on a yearly basis as of 31.12.2016. Source: SIX Swiss Exchange Ltd

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