

## VSMI<sup>®</sup> – Factsheet

### **VSMI<sup>®</sup> – Volatility Index on the SMI<sup>®</sup>**

The VSMI<sup>®</sup> 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<sup>®</sup> applies implicit variances to all Eurex-traded SMI<sup>®</sup> options of the same duration. Apart from the subindices for specific durations, the VSMI<sup>®</sup> – 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<sup>®</sup> and VDAX-NEW<sup>®</sup>. It can be downloaded for reference purposes via the SIX Swiss Exchange Website:

[www.six-swiss-exchange.com/indices/strategy\\_indices/vsmi\\_en.html](http://www.six-swiss-exchange.com/indices/strategy_indices/vsmi_en.html)

The VSMI<sup>®</sup> and the trading day. The continuous calculation of any given subindex begins only once all of the required volatility subindices are calculated between 8:50 am and 5:30 pm on every Eurex input data have been collected. The subindex is then recalculated and published every minute.

### **How to interpret the VSMI<sup>®</sup>?**

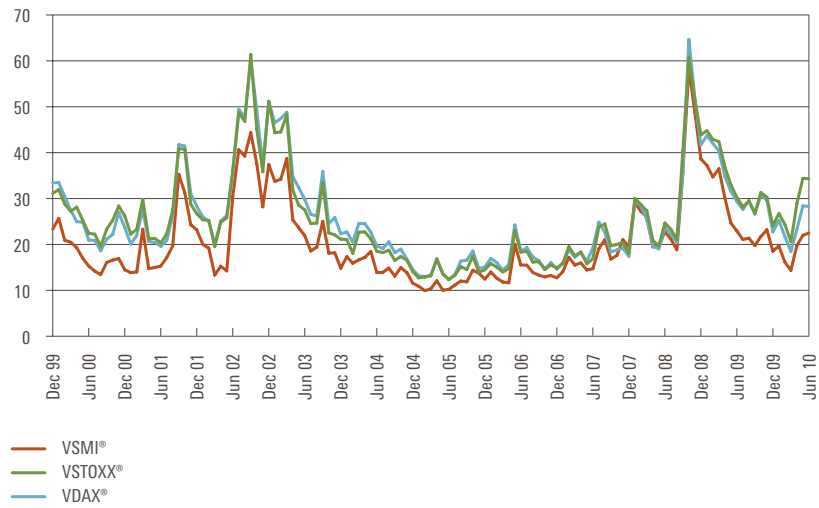
The VSMI<sup>®</sup> is a tool that enables investors to monitor anticipated fluctuations in the SMI<sup>®</sup>. VSMI<sup>®</sup> readings reflect volatility in annualised percentage points. For example, if the SMI<sup>®</sup> currently stands at 6 000 points and the VSMI<sup>®</sup> has a value of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

The formula for calculating the fluctuation range of the SMI<sup>®</sup> over the next 30 days is as follows:

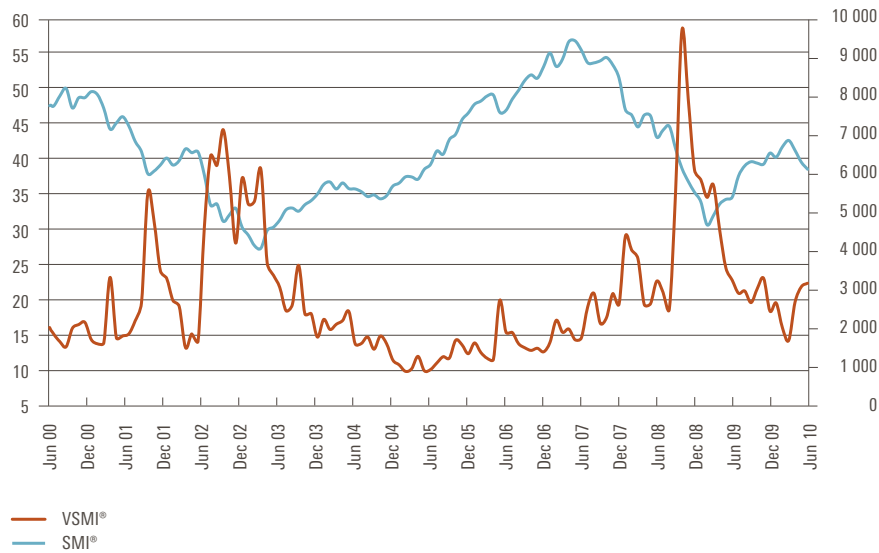
SMI<sup>®</sup> index level x square root of (30 : 365) x VSMI<sup>®</sup> in % per year

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

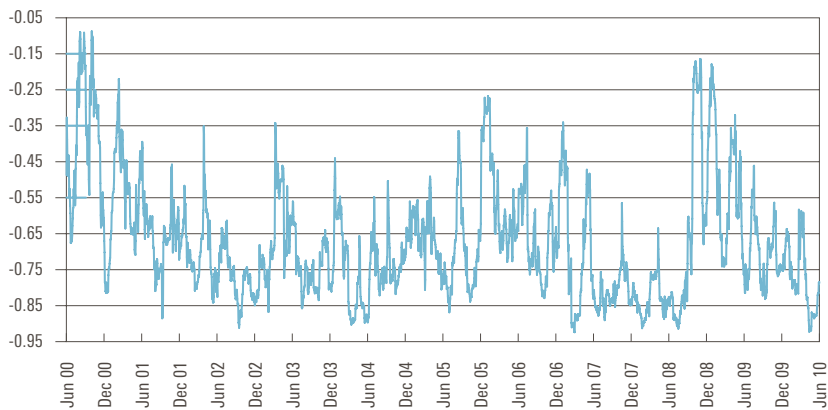
### Historical trends for VSMI®, VSTOXX®, VDAX-NEW®



### Historical comparison of VSMI® and SMI®



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



## VSMI® index levels

Year	Close	High	Low	Mean
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	21.08

## Quick Facts

	VSMI
<b>Definition</b>	Volatility index on the SMI
<b>Symbol</b>	VSMI
<b>ISIN</b>	CH0019900841
<b>Securitiy no.</b>	1990084
<b>Reuters Ric</b>	.V3X
<b>Bloomberg ticker</b>	V3X
<b>Historical data since</b>	04.01.1999
<b>Launch</b>	20.04.2005
<b>Publication</b>	Price update every minute
<b>Index-based products</b>	Eurex futures structured products

**Further information can be found on our website:**  
**[www.six-swiss-exchange.com/indices/overview\\_en.html](http://www.six-swiss-exchange.com/indices/overview_en.html)**  
**and on:**

**Index Department:**

E-mail: [indices@six-group.com](mailto:indices@six-group.com)

T +41 58 854 22 80, F +41 58 854 22 42

**SIX Swiss Exchange Ltd**

None of the information contained herein constitutes an offer to purchase or sell a financial instrument traded on SIX Swiss Exchange Ltd. SIX Swiss Exchange Ltd assumes no liability for the accuracy, completeness or uninterrupted availability of said information or for any damages arising from actions taken on the basis of information contained in this or any other of its publications. SIX Swiss Exchange Ltd expressly reserves the right to alter the prices or product composition at any time.

SIX Swiss Exchange Ltd is a joint-stock company under Swiss law that operates a securities exchange authorised and supervised by the Swiss Financial Market Supervisory Authority FINMA. SIX Swiss Exchange Ltd is a stock exchange that is recognised in France, Italy, the Netherlands and the United Kingdom and may take up operations in Austria, Finland, Germany, Sweden, Belgium and Luxembourg.

® SIX Group, SIX Swiss Exchange, SPI, Swiss Performance Index (SPI), SPI EXTRA, SPI ex SLI, SMI, Swiss Market Index (SMI), SMI MID (SMIM), SMI Expanded, SXI, SXI Real Estate, SXI Swiss Real Estate, SXI Life Sciences, SXI Bio+Medtech, SLI, SLI Swiss Leader Index, SBI, SBI Swiss Bond Index, SAR, SAR SWISS AVERAGE RATE, SARON, SCR, SCR SWISS CURRENT RATE, SCRON, SAION, SCION, VSMI and SWX Immobilienfonds Index are trademarks that have been registered in Switzerland and/or abroad by SIX Group Ltd respectively SIX Swiss Exchange Ltd. Their use is subject to a licence.

© SIX Swiss Exchange Ltd, June 2010

---

**Contact**

**SIX Swiss Exchange Ltd**  
Selnaustrasse 30  
P.O. Box 1758  
CH-8021 Zurich

T +41 58 854 54 54  
F +41 58 854 54 55  
[info@six-swiss-exchange.com](mailto:info@six-swiss-exchange.com)  
[www.six-swiss-exchange.com](http://www.six-swiss-exchange.com)