

Calculating the return Stock Market-Indexed

Calculating the return on Stock Market-Indexed Guaranteed Investment (similar method used to calculate the return for Canadian, American and Overseas stock market indices)

An example of how the return is calculated - Overseas Index (5 years)

On November 25, 2008, John Doe purchases a Stock Market-Indexed Guaranteed Investment for \$10,000, linked to the overseas index, for a term of 5 years. The return is based on the increase in value of 3 indices as follows: 33 1/3% European, 33 1/3% UK and 33 1/3% Japanese.

Below are the details of his investment as indicated on the deposit agreement.

Acquisition date:	November 25, 2008
Pre-issue interest rate (sales period):	1.90%
Issue date:	January 17, 2009
Maturity date:	January 17, 2014
Maximum index growth:	41%, or a compound annual rate of 7.11%
Rate of participation in index growth:	100%
Return on investment (from issue date to maturity date):	The return on maturity depends on fluctuations in the reference indices and their weighting in the Stock Market-Indexed Guaranteed Investment - Overseas Index.

How the investment works

– From the acquisition date to the issue date, interest is earned at the pre-issue rate.

Amount invested	\$10,000.00
Interest earned between November 25, 2008 to January 17, 2009 at a rate of 1.90%	<u>\$27.15</u>
Total	\$10,027.15

The return of the Stock Market-Indexed Guaranteed Investment - **Overseas Index** is calculated as follows:

$$\text{Interest} = \text{Principal} \times \left[\frac{(CL^2 - CL^1)}{CL^1} \times 33 \frac{1}{3}\% \text{ for } I_1 + \frac{(CL^2 - CL^1)}{CL^1} \times 33 \frac{1}{3}\% \text{ for } I_2 + \frac{(CL^2 - CL^1)}{CL^1} \times 33 \frac{1}{3}\% \text{ for } I_3 \right] \times 100.00 \%$$

Maximum: **41.000 %** of the principal

Principal	=	The initial amount of deposit plus the interest accrued between the date of acquisition and the date of issue.
CL ²	=	The average closing level of each of the reference indexes of NOVEMBER 14, 2013, DECEMBER 14, 2013, AND JANUARY 14, 2014 (or the preceding working day).
CL ¹	=	The closing level of each of the reference indexes of JANUARY 14, 2009 .
100.00 %	=	The rate of participation in the three reference indexes growth.

* List of reference indexes and weighting

I ₁ : (Dow Jones EURO STOXX 50) (Euro Zone) 33 1/3%	I ₂ : FTSE 100® (United Kingdom) 33 1/3%	I ₃ : NIKKEI 225 (Japan) 33 1/3%
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From the issue date to the maturity date, the return depends on fluctuations in the stock market index.

Example of how the return is calculated at maturity (5-year term)

Reference Index	Start-of-period index level (CL ¹)	End-of-period index level (CL ²)	Index appreciation	Weighting	Contribution to the SMIGI cumulative yield	Equivalent annual compound yield*
I ₁ : Dow Jones EURO STOXX 50 (Eurozone)	2 694.55	4 388.72	62.87%	33 1/3%	20.96%	6.04%
I ₂ : FTSE 100 (United Kingdom)	4 366.69	6 215.61	42.34%	33 1/3%	14.11%	
I ₃ : NIKKEI 225 (Japan)	9 203.32	8 932.89	-2.94%	33 1/3%	-0.98%	
					34.09%	

Calculation of interest on the principal

$$\$10,027.15 \times 1.3409 = \$13\,445.41$$

The cumulative stock market index growth of **34.09%** corresponds to an annual rate of return of 6.04%.

Since the index growth rate is lower than **41%**, the interest paid to the investor's account on January 14, 2014 will be equal to the total index growth.

The Stock-Market Indexed Guaranteed Investment returns for **Canadian and American** indices are calculated in the same way, but are based on a single reference index.

$\text{Interest} = \text{Principal} \times \left[\left(\frac{\text{CL}^2 - \text{CL}^1}{\text{CL}^1} \right) \times 100.000\% \right]$ <p>Maximum: 41.000 % of the principal</p>
