

Calculating the return

Calculating the return on Stock Market-Indexed Guaranteed Investment (similar method used to calculate the return for Canadian, American and Overseas stock market indices; 5 years)

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

On February 8, 2012, John Doe purchases a Stock Market-Indexed Guaranteed Investment for \$20,000, 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 investment agreement.

Acquisition date:	February 8, 2012
Pre-issue interest rate (sales period):	1.00%
Issue date:	April 19, 2012
Maturity date:	April 19, 2017
Maximum index growth:	25%, or a compound annual rate of 4.56%
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	\$20,000.00
Interest calculated daily between February 8, 2012 to April 19, 2012 at a rate of 1.00%	<u>\$39.30</u>
Total	\$20,039.30

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

$$\text{Interest} = \text{Principal} \times \left[\frac{(CL^2 - CL^1)}{CL^1} \times 33 \frac{1}{3}\% \text{ for } I_1 + \frac{(CL^2 - CL^1)}{CL^1} \times 33 \frac{1}{3}\% \text{ for } I_2 + \frac{(CL^2 - CL^1)}{CL^1} \times 33 \frac{1}{3}\% \text{ for } I_3 \right] \times 100.000\%$$

Maximum: **25.000 %** of the principal

Principal	=	The amount of the Initial Deposit plus the cumulative pre-issue interest accrued between the date of Initial Deposit and the Date of Issue.
CL ²	=	The average closing level of each of the reference indexes on FEBRUARY 13, 2017, MARCH 13, 2017 AND APRIL 11, 2017 (or the following business day).
CL ¹	=	The closing level of each of the reference indexes on APRIL 11, 2012 .
100.000%	=	The rate of participation in the three reference indexes growth.

* List of reference indexes and weighting						
I ₁ : EURO STOXX 50 (Eurozone)	33 1/3%	I ₂ : FTSE 100® (United Kingdom)	33 1/3%	I ₃ : NIKKEI 225 (Japan)	33 1/3%	

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

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 : EURO STOXX 50® (Eurozone)	2 339.51	3 455.57	47.70%	33 1/3%	15.90%	
I ₂ : FTSE 100® (United Kingdom)	5 670.82	6 588.51	16.18%	33 1/3%	5.39%	
I ₃ : NIKKEI 225® (Japan)	8 447.88	9 320.13	10.33%	33 1/3%	<u>3.44%</u>	
					24.73%	4.52%

* The yield is presented for information purpose only and is not indicative of future performance

Calculation of interest on the principal

$$\$20,039.30 \times 1.2473 = \$24,995.02$$

In this example of a bull market, the cumulative stock market index growth of **24.73%** corresponds to an annual rate of return of **4.52%**.

Since the index growth rate is lower than 25%, the interest paid to the investor's account on April 19, 2017 will be equal to the total index growth.

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

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 : EURO STOXX 50® (Eurozone)	2 339.51	2 200.55	-5.94%	33 1/3%	-1.98%	
I ₂ : FTSE 100® (United Kingdom)	5 670.82	5 057.10	-10.82%	33 1/3%	-3.61%	
I ₃ : NIKKEI 225® (Japan)	8 447.88	8 223.23	-2.66%	33 1/3%	<u>-0.89%</u>	
					0.00%	0.00%

* The yield is presented for information purpose only and is not indicative of future performance

Calculation of interest on the principal

$$\$20,039.30 \times 1.0 = \$20,039.30$$

In this example of a bear market, the growth of the index is zero, therefore no interest will be paid to the account holder on April 19, 2017 Only the capital guarantee will apply.

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.

$$\text{Interest} = \text{Principal} \times \left[\left(\frac{\text{CL}^2 - \text{CL}^1}{\text{CL}^1} \right) \times 100.000\% \right]$$

Maximum: **25.000%** of the principal