

Calculating the return

Calculating the return on a Desjardins Enhanced Return Guaranteed Investment– Health Care (6-year term) (similar method used to calculate the return for Desjardins Enhanced Return Guaranteed Investment – Consumer Staples and Financial Services)

On February 8, 2012, John Doe invests \$20,000 in a Desjardins Enhanced Return Guaranteed Investment for a 6-year term. The return is calculated based on a basket of 10 equally weighted stocks (1/10 = 10% each):

- A combination of 10 stocks from the largest international companies in the health care industry.

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 17, 2012
Maturity date:	April 17, 2018
Maximum index growth:	Minimum interest = 8% and maximum = 29%
Rate of participation in raw material price:	100%
Return on investment (from issue date to maturity date):	The return on maturity depends on the price fluctuations of 10 stocks.

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 17, 2012 at a rate of 1.00%	<u>\$38.18</u>
Total	\$20,038.18

$$\text{Interest} = \text{Principal} \times \left\{ \left[\left(\frac{\text{CP}^2 \text{ for } S_1}{\text{CP}^1} + \frac{\text{CP}^2 \text{ for } S_2}{\text{CP}^1} + \dots + \frac{\text{CP}^2 \text{ for } S_{10}}{\text{CP}^1} \right) \times 1/10 \right] - 1 \right\} \times 100.000 \%$$

Interest: minimum of 8.000% and maximum of 29.000%

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
CP ²	=	The average closing level of each of the reference indexes on FEBRUARY 12, 2018, MARCH 12, 2018 AND APRIL 11, 2018 (or the following business day).
CP ¹	=	The closing level of each of the reference indexes on APRIL 11, 2012 .
S ₁ to S ₁₀	=	Each one of the 10 securities listed on the following page.
100.000 %	=	The rate of participation in the growth of the basket of securities.

EXAMPLE OF YIELD CALCULATION AT MATURITY (6-year term)

Security and corresponding Bloomberg rating	CP ¹	CP ²		CP ² / CP ¹ considered	
		Bull market	Bear market	Bull market	Bear market
s ₁ : Novartis AG (NOVN VX EQUITY)	100	135	90	1.35	0.90
s ₂ : Roche Holding AG (ROG VX EQUITY)	100	99	85	0.99	0.85
s ₃ : Sanofi-Aventis SA (SAN FP EQUITY)	100	145	115	1.45	1.15
s ₄ : GlaxoSmithkline (GSK LN EQUITY)	100	113	98	1.13	0.98
s ₅ : Johnson & Johnson (JNJ UN EQUITY)	100	146	125	1.46	1.25
s ₆ : Takeda Pharmaceutical Co. Ltd (4502 JT EQUITY)	100	97	82	0.97	0.82
s ₇ : Pfizer Inc. (PFE UN EQUITY)	100	126	108	1.26	1.08
s ₈ : Bristol-Myers Squibb Co. (BMY UN EQUITY)	100	137	122	1.37	1.22
s ₉ : Eli Lilly & Co. (LLY UN EQUITY)	100	140	117	1.40	1.17
s ₁₀ : Merck & Co. Inc. (MRK UN EQUITY)	100	149	118	1.49	1.18
Average CP²/CP¹				1.2870	1.0600
Cumulative appreciation				28.70%	8.00%
Compound annual yield[*]				4.29%	1.29%

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

In this example of a bull market :

Calculation of interest on the principal

$$\$20,038.18 \times 1.287 = \$25,789.14$$

The cumulative stock market index growth of 28.70% corresponds to an annual rate of return of 4.29%.

Since the index growth rate is lower than 29%, the interest paid to the investor's account on April 17, 2018 will be equal to the total index growth.

In this example of a bear market :

Calculation of interest on the principal

$$\$20,038.18 \times 1.08 = \$21,641.23$$

The growth of the index is below the minimum guaranteed, therefore the interest payment to the account holder on April 17, 2018 will equal only the minimum guaranteed return of 8% which corresponds to an annual compound rate of return of 1.29%.