



RBC LiONS™ Barrier Protection Securities

Short Term
3-5 Years

Full Upside Participation

Barrier Protection
on the Downside

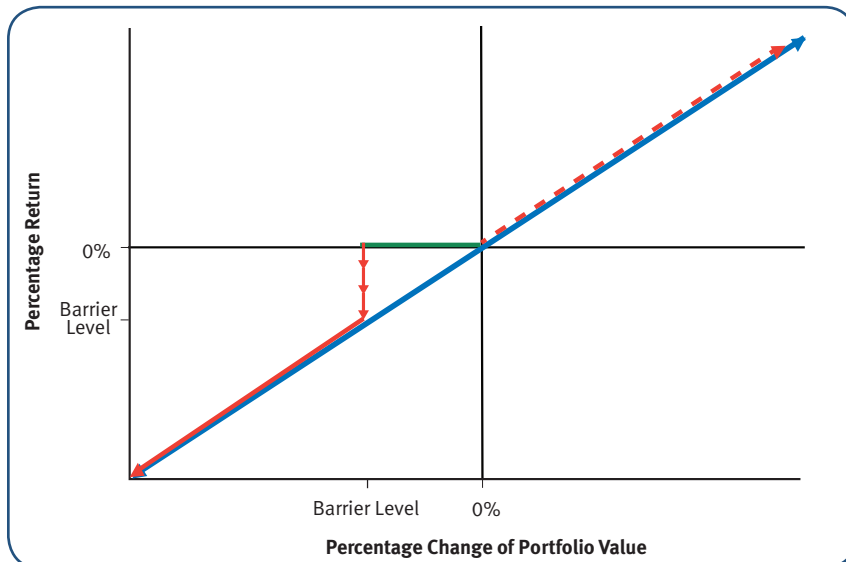
UNDERLYING ASSET CLASSES

- Equities
- Indices
- Commodities
- Foreign Exchange

INVESTMENT HIGHLIGHTS

- › Return linked to the upside price performance of the Underlying Asset as measured over the term of the security.
- › For any positive performance in the Underlying Asset the investor will receive 100% of the appreciation of the Underlying Asset.
- › For negative performance whose absolute value is less than the Barrier, the investor will receive a return of the Principal Amount.
- › For negative performance whose absolute value is greater than the Barrier, the investor will receive a return equal to the performance of the Underlying Asset.
- › CAD denominated with foreign currency protection (can also be denominated in other major currencies eg. USD, EUR, etc.)

ILLUSTRATION OF THE PAYMENT AT MATURITY



- Portfolio (price return)
- - - Security Payout if Percentage Change is zero or positive
- Security Payout if Percentage Change is negative, declining by less than the barrier (i.e. the Final Portfolio Value is equal to or above the Protection Barrier Level)
- Security Payout if Percentage Change is negative, declining by more than the Barrier (i.e. the Final Portfolio Value is below the Protection Barrier Level)

In the sample calculations below, it is assumed that the issue size of the Securities is \$20,000,000 and the (hypothetical) closing prices of the Underlying Securities comprising the Portfolio on the initial Valuation Date are as illustrated in the table below. The Barrier is 60% and the term is 3 years. These Levels are hypothetical and are used for illustrative purposes only.

Hypothetical Calculation of the Initial Portfolio Value:

Company Name	Symbol	Original Valuation Price	Underlying Share Value in Portfolio	Weight	Number of Shares in the Portfolio
Royal Bank of Canada	RY	\$64.10	\$2,000,000.00	10%	31,201
Toronto-Dominion Bank	TD	\$84.09	\$2,000,000.00	10%	23,784
Bank of Nova Scotia	BNS	\$59.61	\$2,000,000.00	10%	33,551
Canadian Imperial Bank of Commerce	CM	\$80.51	\$2,000,000.00	10%	24,842
Manulife Financial Corp	MFC	\$16.22	\$2,000,000.00	10%	123,305
Sun Life Financial Inc	SLF	\$30.25	\$2,000,000.00	10%	66,116
National Bank of Canada	NA	\$76.96	\$2,000,000.00	10%	25,988
Bank of Montreal	BMO	\$63.70	\$2,000,000.00	10%	31,397
Power Corp of Canada	POW	\$29.18	\$2,000,000.00	10%	68,540
Brookfield Asset Management	BAM/A	\$38.18	\$2,000,000.00	10%	52,383

Hypothetical Calculation of the Final Portfolio Value:

Company Name	Symbol	Final Valuation Price	Number of Shares in the Portfolio	Underlying Share Value in Portfolio
Royal Bank of Canada	RY	\$75.00	31,201	\$2,340,093.60
Toronto-Dominion Bank	TD	\$121.26	23,784	\$2,884,052.80
Bank of Nova Scotia	BNS	\$67.00	33,551	\$2,247,944.98
Canadian Imperial Bank of Commerce	CM	\$92.71	24,842	\$2,303,067.94
Manulife Financial Corp	MFC	\$14.05	123,305	\$1,732,373.33
Sun Life Financial Inc	SLF	\$55.41	66,116	\$3,663,471.07
National Bank of Canada	NA	\$80.01	25,988	\$2,079,261.95
Bank of Montreal	BMO	\$80.84	31,397	\$2,538,147.57
Power Corp of Canada	POW	\$26.00	68,540	\$1,782,042.49
Brookfield Asset Management	BAM/A	\$65.47	52,383	\$3,429,544.26

Based on those assumptions, the initial Portfolio Value would be the sum of the Underlying Security values, which is \$20,000,000

Based on those assumptions, the Final Portfolio Value would be the sum of the Underlying Security values, which is \$25,000,000.

SAMPLE CALCULATION OF THE PAYMENT AMOUNT

Example #1 — Calculation of the Redemption Amount where Percentage Change is zero or positive.

Assuming that the Initial Portfolio Value is \$20,000,000.00 and the Final Portfolio Value is \$25,000,000, the Redemption Amount on each \$100 Principal Amount Security would be calculated as follows:

Initial Portfolio Value = \$20,000,000.00

Final Portfolio Value = \$25,000,000

$$\text{Percentage Change} = \frac{(\$25,000,000 - \$20,000,000.00)}{\$20,000,000.00} = 0.25 \text{ or } 25.00\%$$

Since the Percentage Change is zero or positive, the Redemption Amount is calculated as follows:

$$\text{Redemption Amount} = \$100 + (\$100 \times 25.00\%) = \$125.00$$

In this example, the Redemption Amount provides a return equivalent to an annually compounded rate of return of 4.56%.

Example #2 — Calculation of the Redemption Amount where Percentage Change is negative declining by 40.00% or less (i.e. the Final Portfolio Value is equal to or above the Protection Barrier Level).

Assuming that the Initial Portfolio Value is \$20,000,000.00 and the Final Portfolio Value is \$15,000,000, the Redemption Amount would be calculated as follows:

Initial Portfolio Value = \$20,000,000.00

Final Portfolio Value = \$15,000,000

$$\text{Percentage Change} = \frac{(\$15,000,000 - \$20,000,000.00)}{\$20,000,000.00} = -0.25 \text{ or } -25.00\%$$

Since the Percentage Change is negative declining by 40.00% or less, and the Final Portfolio Value is equal to or above the Protection Barrier Level, the Redemption Amount will be as follows:

$$\text{Redemption Amount} = \$100.00$$

In this example, the Redemption Amount provides a return of 0.00%.

Example #3 — Calculation of the Redemption Amount where Percentage Change is negative declining by more than 40.00% (i.e. the Final Portfolio Value is below the Protection Barrier Level).

Assuming that the Initial Portfolio Value is \$20,000,000.00 and the Final Portfolio Value is \$8,000,000, the Redemption Amount would be calculated as follows:

Initial Portfolio Value = \$20,000,000.00

Final Portfolio Value = \$8,000,000

$$\text{Percentage Change} = \frac{(\$8,000,000 - \$20,000,000.00)}{\$20,000,000.00} = -0.60 \text{ or } -60.00\%$$

Since the Percentage Change is negative declining by more than 40.00%, and the Final Portfolio Value is below the Protection Barrier Level, the Redemption Amount is calculated as follows:

$$\text{Redemption Amount} = \$100 + (\$100 \times -60.00\%) = \$40.00$$

In this example, the Redemption Amount provides a return equivalent to an annually compounded loss rate of 16.75%.