

Shadow Portfolio Returns vs. Actual Portfolio Returns March-August 2019

Line No.		Returns (%)	Actual Return - Shadow Portfolio	Actual Return - Passive Return
1	Shadow Portfolio-P1 Basic	9.34%	0.83%	
2	Shadow Portfolio-P2 Basic Unconstrained	9.14%	1.03%	
3	Passive Return on the Basic Portfolio	10.17%		
4	Actual Return on the Basic Portfolio	7.00%		-3.17%
5	Shadow Portfolio-P3 EFB	7.54%	0.23%	
6	Shadow Portfolio-P4 EFB Unconstrained	15.15%	-7.37%	
7	Passive Return on the EFB Portfolio	7.77%		
8	Actual Return on the EFB Portfolio	3.96%		-3.82%

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Shadow Portfolio 1 Basic (including RRBs)

Line No.	Asset Class	Asset Allocation Weights (%)	Mar-19 Returns (%)	Apr-19 Returns (%)	May-19 Returns (%)	Jun-19 Returns (%)	Jul-19 Returns (%)	Aug-19 Returns (%)	March-August 2019 Returns (%)	March-April 2019 Returns (%)
1	Fixed Income									
	Real Return Bonds	24.0%	4.13%	0.16%	2.03%	1.36%	0.45%	1.86%	10.36%	4.30%
2	Mid-Term Provincials	27.0%	2.07%	0.13%	1.36%	0.59%	0.08%	1.89%	6.26%	2.20%
3	Long-Term Provincials	9.0%	4.69%	-0.79%	3.54%	2.25%	0.39%	3.41%	14.15%	3.86%
4	Mid-Term Corporate	9.0%	2.18%	0.52%	1.30%	0.83%	0.51%	1.34%	6.86%	2.71%
5	Long-Term Corporate	11.0%	3.88%	-0.20%	2.72%	2.48%	0.88%	2.33%	12.66%	3.67%
6	MUSH Bonds	20.0%	3.12%	-0.32%	2.29%	1.35%	0.22%	2.45%	9.41%	2.79%
7	Total	100.0%	3.22%	-0.04%	2.05%	1.31%	0.35%	2.13%	9.34%	3.18%

8 **Notes:**

9 For Real Return Bonds, the monthly returns of the RRB Canada Index were applied.

10 For other asset classes, the returns were based on the benchmarks as defined in the Investment Policy Statement for each investment portfolio (effective July 31, 2018).

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Shadow Portfolio 2 Basic (Unconstrained)

Line No.	Asset Class	Asset Allocation Weights (%)	Mar-19 Returns (%)	Apr-19 Returns (%)	May-19 Returns (%)	Jun-19 Returns (%)	Jul-19 Returns (%)	Aug-19 Returns (%)	March-August 2019 Returns (%)	March-April 2019 Returns (%)
1	Fixed Income									
	Short-Term Provincials	22.0%	0.86%	0.22%	0.51%	0.10%	-0.05%	0.78%	2.44%	1.08%
2	Mid-Term Provincials	10.0%	2.07%	0.13%	1.36%	0.59%	0.08%	1.89%	6.26%	2.20%
3	MUSH Bonds	10.0%	3.12%	-0.32%	2.29%	1.35%	0.22%	2.45%	9.41%	2.79%
4	Private Debt-Universe	15.0%	2.35%	-0.10%	1.69%	0.91%	0.17%	1.88%	7.08%	2.25%
5	3X Real Return Bonds	16.0%	12.13%	0.20%	5.81%	3.82%	1.05%	5.30%	31.33%	12.35%
6	Public Equities									
	Canadian Equity	13.0%	0.72%	2.70%	-3.20%	2.53%	0.43%	-0.03%	3.07%	3.43%
7	Private Equity	5.0%	1.01%	3.22%	-3.06%	2.53%	0.34%	0.43%	4.43%	4.27%
8	Alternatives									
	Real Estate	7.0%	1.00%	0.77%	0.77%	0.11%	0.84%	0.18%	3.72%	1.77%
9	Infrastructure	2.0%	1.08%	0.85%	0.85%	0.19%	0.92%	0.26%	4.21%	1.94%
10	Total	100.0%	2.83%	0.48%	1.06%	1.17%	0.32%	1.47%	9.14%	3.87%

11 **Notes:**

12 The 3X Real Return Bonds returns were based on the monthly returns of the RRB Canada Index and borrowing costs at the 91 day Tbill rate.

13 The allocation to the Diversified Growth Fund (1%) was added to the Real Estate allocation (6%).

14 For Private Equity, the returns of the S&P/TSX Total Return Index were assumed.

15 For other asset classes, the returns were based on the benchmarks as defined in the Investment Policy Statement for each investment portfolio (effective July 31, 2018).

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Basic Portfolio Policy Weights - Passive Benchmark Returns

Line No.	Asset Class	Asset Allocation Weights (%)	Mar-19 Returns (%)	Apr-19 Returns (%)	May-19 Returns (%)	Jun-19 Returns (%)	Jul-19 Returns (%)	Aug-19 Returns (%)	March-August 2019 Returns (%)	March-April 2019 Returns (%)
1	Fixed Income									
	Real Return Bonds	0.0%	4.13%	0.16%	2.03%	1.36%	0.45%	1.86%	10.36%	4.30%
2	Mid-Term Provincials	28.0%	2.07%	0.13%	1.36%	0.59%	0.08%	1.89%	6.26%	2.20%
3	Long-Term Provincials	32.0%	4.69%	-0.79%	3.54%	2.25%	0.39%	3.41%	14.15%	3.86%
4	Mid-Term Corporate	9.0%	2.18%	0.52%	1.30%	0.83%	0.51%	1.34%	6.86%	2.71%
5	Long-Term Corporate	11.0%	3.88%	-0.20%	2.72%	2.48%	0.88%	2.33%	12.66%	3.67%
6	MUSH Bonds	20.0%	3.12%	-0.32%	2.29%	1.35%	0.22%	2.45%	9.41%	2.79%
7	Total	100.0%	3.33%	-0.26%	2.39%	1.50%	0.33%	2.49%	10.17%	3.06%

8 **Notes:**

9 For Real Return Bonds, the monthly returns of the RRB Canada Index were applied.

10 For other asset classes, the returns were based on the benchmarks as defined in the Investment Policy Statement for each investment portfolio (effective July 31, 2018).

11 Weights as specified in Section 7.1 of the Investment Policy Statement

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Shadow Portfolio 3 EFB (including RRBs)

Line No.	Asset Class	Asset Allocation Weights (%)	Mar-19 Returns (%)	Apr-19 Returns (%)	May-19 Returns (%)	Jun-19 Returns (%)	Jul-19 Returns (%)	Aug-19 Returns (%)	March-August 2019 Returns (%)	March-April 2019 Returns (%)
1	Fixed Income									
	Real Return Bonds	10.0%	4.13%	0.16%	2.03%	1.36%	0.45%	1.86%	10.36%	4.30%
2	Long-Term Corporate	10.0%	3.88%	-0.20%	2.72%	2.48%	0.88%	2.33%	12.66%	3.67%
3	Private Debt-Long	20.0%	4.50%	-0.73%	3.37%	2.15%	0.41%	3.41%	13.74%	3.74%
4	Public Equities									
	Canadian Equity	10.0%	0.72%	2.70%	-3.20%	2.53%	0.43%	-0.03%	3.07%	3.43%
5	Global Equity (large cap)	18.0%	2.91%	3.89%	-4.98%	3.19%	0.93%	-0.91%	4.83%	6.91%
6	Global Equity (low vol)	7.0%	2.91%	3.89%	-4.98%	3.19%	0.93%	-0.91%	4.83%	6.91%
7	Alternatives									
	Real Estate	15.0%	1.00%	0.77%	0.77%	0.11%	0.84%	0.18%	3.72%	1.77%
8	Infrastructure	10.0%	1.08%	0.85%	0.85%	0.19%	0.92%	0.26%	4.21%	1.94%
9	Total	100.0%	1.86%	1.44%	-0.89%	1.47%	0.63%	0.24%	7.54%	4.07%

10 **Notes:**

11 Global Equity (large cap) and Global Equity (low vol) returns were based on the returns of the MSCI Net World Index in USD converted into CAD.

12 For other asset classes, the returns were based on the benchmarks as defined in the Investment Policy Statement for each investment portfolio (effective July 31, 2018).

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Shadow Portfolio 4 EFB (Unconstrained)

Line No.	Asset Class	Asset Allocation Weights (%)	Mar-19 Returns (%)	Apr-19 Returns (%)	May-19 Returns (%)	Jun-19 Returns (%)	Jul-19 Returns (%)	Aug-19 Returns (%)	March-August 2019 Returns (%)	March-April 2019 Returns (%)
1	Fixed Income									
	Mid-Term Provincials	20.0%	2.07%	0.13%	1.36%	0.59%	0.08%	1.89%	6.26%	2.20%
2	MUSH Bonds	10.0%	3.12%	-0.32%	2.29%	1.35%	0.22%	2.45%	9.41%	2.79%
3	Private Debt-Universe	15.0%	2.35%	-0.10%	1.69%	0.91%	0.17%	1.88%	7.08%	2.25%
4	Public Equities									
	3X Real Return Bonds	8.5%	12.13%	0.20%	5.81%	3.82%	1.05%	5.30%	31.33%	12.35%
5	3X Long-Term Provincial	18.5%	13.81%	-2.65%	10.34%	6.49%	0.87%	9.95%	44.38%	10.79%
6	Canadian Equity	14.0%	0.72%	2.70%	-3.20%	2.53%	0.43%	-0.03%	3.07%	3.43%
7	Private Equity	6.0%	1.01%	3.22%	-3.06%	2.53%	0.34%	0.43%	4.43%	4.27%
8	Alternatives									
	Real Estate	3.0%	1.00%	0.77%	0.77%	0.11%	0.84%	0.18%	3.72%	1.77%
9	Infrastructure	5.0%	1.08%	0.85%	0.85%	0.19%	0.92%	0.26%	4.21%	1.94%
	Total	100.0%	4.50%	-0.04%	2.53%	2.15%	0.42%	2.93%	15.15%	4.99%

10 **Notes:**

- 11 The 3X Real Return Bonds returns were based on the monthly returns of the RRB Canada Index and borrowing costs at the 91 day Tbill rate.
- 12 The 3X Long Term Provincials returns were based on the monthly returns of the Long Term Provincial Index and borrowing costs at the 91 day Tbill rate.
- 13 For Private Equity, the returns of the S&P/TSX Total Return index were applied.
- 14 For other asset classes, the returns were based on the benchmarks as defined in the Investment Policy Statement for each investment portfolio (effective July 31, 2018).

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EFB Portfolio Policy Weights - Passive Benchmark Returns

Line No.	Asset Class	Asset Allocation Weights (%)	Mar-19 Returns (%)	Apr-19 Returns (%)	May-19 Returns (%)	Jun-19 Returns (%)	Jul-19 Returns (%)	Aug-19 Returns (%)	March-August 2019 Returns (%)	March-April 2019 Returns (%)
1	Fixed Income									
	Real Return Bonds	0.0%	4.13%	0.16%	2.03%	1.36%	0.45%	1.86%	10.36%	4.30%
2	Long-Term Corporate	20.0%	3.88%	-0.20%	2.72%	2.48%	0.88%	2.33%	12.66%	3.67%
3	Private Debt-Long	20.0%	4.50%	-0.73%	3.37%	2.15%	0.41%	3.41%	13.74%	3.74%
4	Public Equities									
	Canadian Equity	10.0%	0.72%	2.70%	-3.20%	2.53%	0.43%	-0.03%	3.07%	3.43%
5	Global Equity (large cap)	18.0%	2.91%	3.89%	-4.98%	3.19%	0.93%	-0.91%	4.83%	6.91%
6	Global Equity (low vol)	7.0%	2.91%	3.89%	-4.98%	3.19%	0.93%	-0.91%	4.83%	6.91%
7	Alternatives									
	Real Estate	15.0%	1.00%	0.77%	0.77%	0.11%	0.84%	0.18%	3.72%	1.77%
8	Infrastructure	10.0%	1.08%	0.85%	0.85%	0.19%	0.92%	0.26%	4.21%	1.94%
9	Total	100.0%	1.83%	1.40%	-0.82%	1.58%	0.67%	0.29%	7.77%	4.01%

10 **Notes:**

11 Global Equity (large cap) and Global Equity (low vol) returns were based on the returns of the MSCI Net World Index in USD converted into CAD.

12 For other asset classes, the returns were based on the benchmarks as defined in the Investment Policy Statement for each investment portfolio (effective July 31, 2018).

13 Weights as specified in Section 7.1 of the Investment Policy Statement