Paterson & Associates

November 2017

Monthly WRAP Fund Report

Prepared December 13, 2017

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November 2017

								Correl	ations			Ret	urns		
		Average	Monthly	. .						Cdn.					-
Nama	Dating	Monthly	Standard	Sharpe	Almha	Data	TOV	CODEOO	MSCI	Universe	2 Manth	4 V	2 V	E Voor	MED
Name	Rating	Return	Deviation	Ratio	Alpha	Beta	TSX	S&P 500	EAFE	Bond	3 Month	1 Year	3 Year	5 Year	MER
Conservative Portfolios	Typical Asse	et Mix: 70% -	90% Fixed I	ncome / 10)% - 30%	Equity									
Marquis Balanced Income Portfolio	В	0.53%	1.20%	0.39	0.20%	0.90	0.6599	0.7323	0.7946	0.5643	2.9%	8.2%	5.0%	6.5%	2.37
2 RBC Strategic Monthly Income Bond	В	0.52%	1.18%	0.39	0.21%	1.01	0.3474	0.6443	0.7364	0.7794	1.8%	5.6%	5.1%	N/A	1.83
3 Scotia Partners Balanced Income Portfolio	В	0.46%	1.05%	0.38	0.14%	0.86	0.5276	0.7431	0.7873	0.7473	2.4%	5.4%	4.1%	5.6%	2.14
4 Scotia Select Balanced Income	В	0.47%	1.08%	0.37	0.14%	0.87	0.4904	0.7745	0.8143	0.7413	2.5%	5.7%	4.1%	5.7%	1.88
5 Meritage Moderate Portfolio	В	0.46%	1.10%	0.36	0.13%	0.89	0.5777	0.7636	0.8248	0.6960	3.0%	5.5%	4.2%	5.6%	2.17
6 Manulife Simplicity Moderate Portfolio	В	0.51%	1.28%	0.35	0.13%	1.01	0.5634	0.7966	0.8622	0.6825	3.5%	7.2%	4.7%	6.2%	2.09
7 CIBC Managed Income Plus Portfolio	В	0.42%	1.10%	0.33	0.10%	0.85	0.4934	0.8162	0.8694	0.7033	3.1%	5.5%	3.7%	5.1%	2.19
8 TD Mgd Income Portfolio	В	0.43%	1.12%	0.33	0.09%	0.89	0.4349	0.8085	0.8274	0.7753	2.9%	4.7%	3.4%	5.2%	1.89
9 Scotia Partners Income Portfolio	С	0.40%	0.94%	0.36	0.05%	0.63	0.5237	0.6504	0.7470	0.7656	1.7%	4.7%	3.6%	4.8%	2.04
10 DynamicEdge Conservative Class Portfolio	С	0.46%	1.12%	0.36	0.05%	0.74	0.4887	0.8011	0.8465	0.6150	3.0%	7.7%	4.3%	5.6%	2.01
11 SEI Conservative Monthly Income Class S	С	0.39%	1.00%	0.33	0.07%	0.87	0.5493	0.7086	0.7669	0.7927	2.2%	4.4%	3.4%	4.8%	1.70
12 RBC Select Very Conservative Portfolio	С	0.38%	0.96%	0.33	0.07%	0.81	0.4897	0.7459	0.7885	0.7939	2.3%	4.8%	3.6%	4.6%	1.68
13 Empire Life Emblem Conservative Portfolio	С	0.42%	1.08%	0.33	0.09%	0.86	0.5635	0.7982	0.8099	0.6920	3.3%	4.1%	2.9%	5.0%	2.05
14 Meritas Income & Growth Portfolio	С	0.39%	1.03%	0.32	0.08%	0.84	0.5115	0.7923	0.8007	0.7457	2.9%	3.8%	3.6%	4.7%	2.05
15 RBC Managed Payout Solution	С	0.36%	0.95%	0.32	0.07%	0.78	0.7520	0.6350	0.6848	0.6014	2.6%	4.7%	3.4%	4.4%	1.62
16 Scotia Selected Income Portfolio	С	0.39%	1.02%	0.32	0.07%	0.85	0.4423	0.6748	0.7451	0.8078	1.8%	4.3%	3.2%	4.7%	1.77
17 Symmetry Conservative Income Portfolio	С	0.36%	0.94%	0.31	0.06%	0.80	0.4913	0.7007	0.7526	0.8069	2.3%	5.1%	3.6%	4.3%	1.85
18 Desjardins Chorus II Balanced Income Fund	С	0.46%	1.29%	0.31	0.06%	1.06	0.5327	0.7324	0.8394	0.7476	3.6%	7.1%	4.0%	5.5%	1.81
19 Fidelity Income Portfolio	С	0.48%	1.38%	0.31	0.08%	1.07	0.3480	0.7619	0.8043	0.8011	3.6%	4.6%	4.2%	5.8%	2.37
20 Meritage Moderate Income Portfolio	С	0.38%	1.05%	0.31	0.06%	0.87	0.6135	0.6720	0.7612	0.7052	2.7%	5.8%	3.9%	4.6%	2.15
21 Desjardins Chorus II Balanced Income Corp. Class	С	0.43%	1.27%	0.29	0.06%	1.00	0.6226	0.7386	0.8382	0.6456	3.8%	8.2%	3.9%	5.2%	1.85
22 TD Advantage Balanced Income Portfolio	С	0.41%	1.17%	0.29	0.04%	0.98	0.4452	0.7531	0.7818	0.8122	3.1%	4.3%	3.1%	4.9%	1.97
23 DynamicEdge Defensive Portfolio	С	0.31%	0.86%	0.29	0.06%	0.66	0.4785	0.7270	0.7950	0.7165	1.9%	4.7%	2.7%	3.7%	1.96
24 National Bank Conservative Strategy Portfolio	С	0.33%	0.94%	0.28	0.04%	0.78	0.6106	0.7161	0.8060	0.7003	3.4%	6.1%	3.2%	4.0%	0.00
25 CIBC Managed Income Portfolio	С	0.31%	0.88%	0.28	0.03%	0.72	0.3963	0.7365	0.8052	0.8279	1.9%	3.7%	2.8%	3.7%	1.80
26 Desjardins Chorus II Conservative Fund	С	0.37%	1.13%	0.28	0.01%	0.96	0.4880	0.6912	0.8044	0.8083	2.8%	5.8%	3.3%	4.5%	1.73
27 Quadrus Moderate Folio	С	0.38%	1.16%	0.27	0.02%	0.95	0.6425	0.7665	0.8244	0.6718	3.5%	4.5%	2.9%	4.6%	2.36
28 Desjardins Chorus II Conservative Corp. Class	С	0.35%	1.10%	0.26	0.01%	0.90	0.5968	0.7012	0.8100	0.6898	3.2%	7.3%	3.3%	4.2%	1.77
29 BMO Select Trust Income Portfolio	С	0.36%	1.17%	0.25	0.00%	0.95	0.3906	0.7403	0.7820	0.8262	3.0%	4.8%	3.6%	4.3%	1.88
30 National Bank Income Managed Portfolio	С	0.31%	1.02%	0.24	0.04%	0.72	0.7980	0.6112	0.6945	0.4123	2.4%	5.9%	2.4%	3.7%	0.00
31 Symmetry Conservative Portfolio	D	0.44%	1.08%	0.35	0.03%	0.74	0.5631	0.8008	0.8245	0.6848	2.8%	5.8%	3.8%	5.3%	2.16
32 CI Portfolio Series Income Fund Class A	D	0.48%	1.20%	0.35	0.00%	0.86	0.3376	0.7890	0.8354	0.7656	2.5%	5.1%	4.0%	5.8%	2.01
33 Sun Life Granite Conservative Portfolio Series A	D	0.45%	1.16%	0.33	-0.02%	0.84	0.4262	0.7784	0.8417	0.7639	2.8%	5.9%	3.9%	5.4%	0.00
34 Fidelity Global Income Portfolio	D	0.56%	1.64%	0.31	-0.09%	1.18	0.2445	0.7742	0.8117	0.7775	4.3%	6.0%	5.2%	6.8%	2.37
35 Renaissance Optimal Income Portfolio	D	0.45%	1.28%	0.30	0.03%	1.10	0.5889	0.6349	0.7684	0.7565	1.9%	5.2%	3.7%	5.4%	1.98
36 TD Comfort Balanced Income Portfolio	D	0.37%	1.05%	0.30	-0.10%	0.49	0.6259	0.7494	0.7904	0.7037	2.8%	3.8%	2.9%	4.5%	1.75
37 Counsel Conservative Portfolio	D	0.45%	1.30%	0.30	-0.06%	0.92	0.4505	0.7958	0.8642	0.7178	3.0%	6.7%	3.8%	5.4%	2.79
38 Scotia INNOVA Income Portfolio	D	0.33%	0.93%	0.29	0.03%	0.79	0.4105	0.6764	0.7275	0.8516	1.9%	3.7%	2.7%	4.0%	1.85
39 Renaissance Optimal Conservative Income Portfolio	D	0.35%	1.03%	0.28	0.02%	0.90	0.4103	0.6638	0.7280	0.8824	1.6%	2.9%	3.0%	N/A	1.62
40 SEI Income 20/80 Class S	D	0.32%	0.96%	0.27	0.00%	0.85	0.4618	0.6547	0.7369	0.8700	1.9%	3.4%	2.8%	3.9%	1.44

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									Corre	lations			Ret	urns		
Nam	ne e	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER
41	Meritage Conservative Portfolio	D	0.32%	0.98%	0.26	0.01%	0.83	0.4486	0.6827	0.7760	0.8246	2.1%	4.0%	3.2%	3.9%	2.17
42	Manulife Simplicity Conservative Portfolio	D	0.34%	1.09%	0.26	-0.01%	0.95	0.4346	0.6767	0.7593	0.8612	2.2%	4.6%	3.3%	4.1%	1.90
43	TD Comfort Conservative Income	D	0.27%	0.86%	0.24	-0.02%	0.76	0.5102	0.6587	0.7256	0.8357	1.8%	2.3%	2.1%	3.2%	1.53
44	SEI Income 20/80 Class P	D	0.29%	0.96%	0.23	-0.03%	0.85	0.4619	0.6547	0.7371	0.8698	1.8%	2.9%	2.4%	3.4%	0.00
45	National Bank Conservative Diversified	D	0.27%	0.93%	0.23	-0.03%	0.80	0.4740	0.6720	0.7405	0.8391	3.2%	4.6%	2.6%	3.3%	1.91
46	BMO Income ETF Portfolio Advisor Class	D	0.31%	1.20%	0.21	-0.07%	1.02	0.4479	0.6716	0.7502	0.8340	3.0%	3.7%	3.2%	3.7%	1.67
47	National Bank Stable Income Managed Portfolio	D	0.14%	0.67%	0.12	-0.04%	0.48	0.6444	0.4378	0.5788	0.5427	1.7%	4.5%	1.4%	1.7%	0.00
48	TD Target Return Conservative Fund	D	0.08%	1.12%	0.02	-0.09%	0.30	0.7248	0.2851	0.4194	0.2334	1.4%	2.5%	0.4%	N/A	1.71
49	TD Mgd Index Income Portfolio	F	0.45%	1.26%	0.31	-0.06%	0.93	0.4314	0.7367	0.8027	0.8411	3.0%	5.0%	3.9%	5.5%	1.49
50	BMO FundSelect Income Portfolio Series A	F	0.34%	1.06%	0.26	-0.09%	0.77	0.4190	0.7602	0.7996	0.8095	2.5%	4.7%	2.9%	4.1%	2.42
51	AGF Elements Yield Portfolio	F	0.41%	1.32%	0.26	-0.10%	0.91	0.3944	0.7205	0.7970	0.7425	3.3%	6.1%	4.3%	4.9%	2.01
52	Desjardins Melodia Conservative Income Portfolio	F	0.33%	1.10%	0.25	-0.12%	0.81	0.5057	0.6881	0.7571	0.8480	2.2%	4.4%	3.0%	N/A	1.97
53	BMO SelectClass Income Portfolio Series A	F	0.33%	1.18%	0.23	-0.15%	0.86	0.4162	0.7539	0.7879	0.8102	2.9%	4.1%	2.7%	4.0%	2.33
54	Empire Life Emblem Diversified Income Portfolio	F	0.29%	1.03%	0.22	-0.03%	0.85	0.3339	0.7715	0.7703	0.8866	2.3%	3.5%	2.6%	N/A	1.90
55	Desjardins Melodia Very Conservative Income Port	F	0.28%	1.02%	0.21	-0.14%	0.76	0.4340	0.6490	0.7122	0.9011	1.7%	3.4%	2.4%	N/A	1.91
56	Quadrus Conservative Folio	F	0.28%	1.04%	0.21	-0.06%	0.91	0.5362	0.6800	0.7611	0.8156	2.5%	3.2%	2.3%	3.4%	2.24
57	Meritage Conservative Income Portfolio	F	0.24%	0.91%	0.20	-0.06%	0.79	0.4828	0.5697	0.6720	0.8410	1.7%	3.6%	2.7%	2.9%	2.10
58	Invesco Intactive Diversified Income Portfolio	F	0.30%	1.22%	0.19	-0.15%	0.73	0.6078	0.5856	0.7059	0.7845	3.4%	4.9%	3.0%	3.6%	1.98
59	Franklin Quotential Diversified Income Portfolio T	, F	0.27%	1.26%	0.16	-0.20%	0.81	0.3752	0.6713	0.7723	0.7352	2.1%	4.5%	2.6%	3.2%	1.96
60	SEI Income 100 Class S	F	0.27%	0.86%	0.10	-0.20%	0.84	0.3752	0.3952	0.7723	0.7352	0.5%	1.2%	1.4%	1.8%	1.44
61	Counsel Managed Yield Portfolio	, F	0.18%	1.15%	0.10	-0.13%	0.91	0.1803	0.5053	0.4850	0.7547	2.3%	2.2%	1.6%	2.1%	2.64
62		F				-0.18%	0.90	0.1872				0.4%	0.7%	0.9%		0.00
62	SEI Income 100 Class P	r	0.11%	0.87%	0.06	-0.08%	0.74	0.1872	0.3955	0.4854	0.9841	0.4%	0.7%	0.9%	1.3%	0.00
	Category Average		0.36%	1.09%	0.27	0.00%	0.85	0.4901	0.6915	0.7609	0.7585	2.5%	4.7%	3.2%	4.4%	1.78
Ва	anced Portfolios	Typical Asse	et Mix: 40% -	· 60% Fixed I	ncome / 40	0% - 60%	Equity									
1	PH&N Balanced Fund Series D	А	0.79%	1.52%	0.48	0.33%	0.86	0.6911	0.7907	0.8613	0.5500	5.6%	10.8%	7.6%	9.8%	0.88
2	Scotia Partners Balanced Growth Portfolio	A	0.75%	1.32%	0.48	0.30%	0.56	0.6085	0.8357	0.8452	0.5583	4.2%	8.7%	5.5%	7.9%	2.24
3	Empire Life Emblem Moderate Growth Portfolio	A	0.64%	1.45%	0.42	0.30%	0.64	0.7057	0.8337	0.7990	0.3904	5.2%	6.1%	4.9%	7.8%	2.35
4	Manulife Strategic Balanced Yield Portfolio	В	0.96%	1.45%	0.50	0.25%	0.68	0.7037	0.8193	0.7990	0.3904	4.3%	11.5%	8.6%	12.0%	2.35
5	Meritage Growth Income Portfolio	В	0.60%	1.32%	0.30	0.30%	0.75	0.7487	0.7399	0.0274	0.1094	4.5%	8.4%	5.5%	7.3%	2.40
6	Meritas Growth & Income Portfolio	В	0.64%	1.44%	0.41	0.19%	0.75	0.6006	0.7399	0.7798	0.4254	5.2%	7.1%	5.9%	7.9%	2.40
		В	0.65%	1.53%	0.40	0.26%	0.71	0.6006	0.8667	0.8300	0.4961	5.2% 4.2%	7.1%	5.9%	7.9% 8.0%	2.41
7	Meritage Growth Portfolio		_													
8	Empire Life Emblem Balanced Portfolio	B B	0.52%	1.24%	0.37	0.17%	0.66	0.6377	0.8254 0.7740	0.8228 0.8325	0.5499 0.5671	4.3% 3.6%	5.1%	3.8% 4.6%	6.3% 6.6%	2.25
9	Meritage Balanced Portfolio	В	0.54% 0.48%	1.30%	0.37 0.36	0.15%	0.73	0.6772 0.6875	0.7740				6.8%	4.6% 4.6%	6.6% 5.8%	2.42
10	Meritage Balanced Income Portfolio			1.15%		0.13%	0.65			0.7789	0.5753	3.7%	7.0%			
11	National Bank Moderate Strategic Portfolio	В	0.52%	1.28%	0.36	0.15%	0.98	0.6124	0.7973	0.8536	0.6241	4.6%	8.3%	4.7%	6.3%	0.00
12	RBC Select Choices Conservative Portfolio	В	0.46%	1.12%	0.36	0.13%	0.90	0.6050	0.7975	0.8323	0.6685	3.3%	5.4%	3.9%	5.6%	1.95
13	SEI Income 40/60 Class S	В	0.50%	1.23%	0.35	0.12%	0.99	0.5748	0.7947	0.8517	0.6992	3.5%	5.9%	4.3%	6.0%	1.63
14	SEI Income 40/60 Class S	В	0.50%	1.23%	0.35	0.12%	0.99	0.5750	0.7947	0.8517	0.6991	3.5%	5.9%	4.3%	6.0%	1.63
15	Scotia INNOVA Balanced Income Portfolio	В	0.44%	1.10%	0.34	0.11%	0.88	0.4992	0.7896	0.8222	0.7322	3.0%	5.2%	3.6%	5.3%	1.97

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16 SEI Balanced Fund Cl	ass P	В	0.50%	1.38%	0.32	0.10%	0.74	0.6203	0.8026	0.8633	0.6435	3.7%	6.1%	4.0%	6.1%	0.00
	e and Growth Managed Portfolic	В	0.46%	1.34%	0.30	0.14%	0.86	0.8039	0.6447	0.7102	0.3271	3.8%	8.2%	3.7%	5.6%	0.00
18 Mawer Balanced Fund		С	0.94%	1.63%	0.54	0.15%	0.81	0.4544	0.8856	0.8648	0.5673	6.1%	11.6%	8.4%	11.7%	0.00
19 Compass Balanced P	ortfolio	С	0.72%	1.31%	0.50	0.16%	0.58	0.6884	0.7990	0.7994	0.4130	4.2%	8.3%	6.1%	8.9%	1.90
20 Axiom Balanced Incor	me Portfolio	С	0.47%	1.21%	0.34	0.09%	1.02	0.6125	0.7394	0.8146	0.7214	3.5%	6.6%	4.1%	5.7%	2.08
21 SEI Income 40/60 Cla		С	0.43%	1.23%	0.30	0.06%	0.99	0.5750	0.7947	0.8517	0.6992	3.3%	5.1%	3.5%	5.2%	0.00
22 National Bank Moder	ate Diversified	С	0.41%	1.17%	0.30	0.04%	0.99	0.6011	0.7315	0.7904	0.7292	4.2%	5.7%	3.5%	4.9%	2.21
23 Scotia Selected Balar	nced Growth	D	0.66%	1.38%	0.43	0.00%	0.67	0.5802	0.8409	0.8741	0.5571	4.0%	9.2%	5.9%	8.0%	2.00
24 RBC Select Choices B	alanced Portfolio	D	0.68%	1.45%	0.42	0.01%	0.68	0.6688	0.8384	0.8410	0.4692	4.8%	8.6%	5.6%	8.3%	2.16
25 BMO Matchmaker Str	rategic Balanced Portfolio	D	0.64%	1.37%	0.42	0.00%	0.66	0.6011	0.8736	0.8136	0.5615	5.5%	7.5%	5.5%	7.8%	0.00
26 National Bank Balance		D	0.69%	1.56%	0.40	-0.05%	0.76	0.6203	0.8493	0.8793	0.5174	5.0%	8.3%	5.6%	8.5%	0.00
27 SEI Balanced 60/40-		D	0.66%	1.53%	0.39	-0.06%	0.74	0.6447	0.8322	0.8782	0.5583	4.9%	8.5%	5.7%	8.1%	1.79
28 SEI Balanced 60/40	Class S	D	0.66%	1.53%	0.39	-0.06%	0.74	0.6449	0.8322	0.8782	0.5582	4.9%	8.5%	5.7%	8.1%	1.79
29 Scotia INNOVA Baland	ced Growth Portfolio	D	0.61%	1.42%	0.39	-0.08%	0.71	0.5334	0.8639	0.8743	0.5978	4.5%	7.8%	5.1%	7.5%	2.09
30 National Bank Balance	ced Diversified	D	0.64%	1.50%	0.38	-0.07%	0.72	0.6093	0.8205	0.8552	0.5870	5.0%	8.4%	5.2%	7.8%	2.49
31 Cl Portfolio Series Cor	nservative Balanced Fnd Cl A	D	0.61%	1.43%	0.38	-0.09%	0.71	0.5485	0.8900	0.8761	0.5505	3.3%	6.3%	4.4%	7.5%	2.46
32 TD Advantage Balanc	ed Growth Portfolio	D	0.64%	1.51%	0.38	-0.08%	0.73	0.6245	0.8565	0.8574	0.5264	5.4%	7.7%	4.7%	7.8%	2.20
33 Renaissance Optimal	Growth & Income Portfolio	D	0.59%	1.40%	0.38	-0.08%	0.69	0.6185	0.8027	0.8168	0.6440	3.2%	6.5%	5.4%	N/A	2.04
34 CC&L Diversified Inco	me Portfolio	D	0.57%	1.35%	0.38	-0.06%	0.64	0.5957	0.8251	0.8315	0.5799	3.7%	6.0%	4.3%	7.0%	2.11
35 Marquis Balanced Gr	owth Portfolio	D	0.70%	1.69%	0.38	-0.07%	0.78	0.5955	0.8400	0.8567	0.4173	5.2%	10.4%	5.3%	8.5%	2.54
36 SEI Balanced Monthly	y Income - P Class	D	0.60%	1.44%	0.38	-0.07%	0.68	0.6567	0.8061	0.8344	0.6041	3.7%	6.6%	5.0%	7.3%	0.00
37 TD Comfort Balanced	Growth Portfolio	D	0.60%	1.45%	0.37	-0.07%	0.68	0.6725	0.8218	0.8298	0.5547	5.0%	7.0%	4.8%	7.3%	2.02
38 DynamicEdge Balanc	ed Portfolio	D	0.60%	1.47%	0.36	-0.09%	0.70	0.4927	0.8167	0.8571	0.5113	4.1%	10.1%	5.3%	7.2%	2.23
39 Marquis Balanced Po	rtfolio	D	0.57%	1.41%	0.36	-0.08%	0.66	0.6013	0.8303	0.8601	0.4691	3.9%	8.2%	4.3%	6.9%	2.56
40 Symmetry Balanced F	Portfolio	D	0.55%	1.35%	0.36	-0.09%	0.66	0.5902	0.8672	0.8564	0.5230	3.4%	7.0%	4.3%	6.7%	2.27
41 DynamicEdge Balanc	ed Class Portfolio	D	0.59%	1.47%	0.36	-0.09%	0.69	0.5017	0.8122	0.8552	0.5104	4.0%	9.9%	5.1%	7.1%	2.25
42 TD Comfort Balanced	Portfolio	D	0.50%	1.27%	0.35	-0.07%	0.59	0.6787	0.7869	0.8104	0.5990	4.0%	5.7%	3.9%	6.1%	1.91
43 Scotia Global Balance	ed	D	0.75%	2.03%	0.34	-0.14%	0.91	0.1551	0.8098	0.7731	0.5573	3.0%	11.2%	5.6%	9.2%	2.00
44 Axiom Diversified Mor	nthly Income Portfolio	D	0.51%	1.32%	0.34	0.04%	0.86	0.8934	0.5752	0.6391	0.3843	4.2%	6.0%	3.8%	6.2%	2.21
45 Quadrus Balanced Fo	ilio	D	0.54%	1.49%	0.32	-0.13%	0.68	0.7443	0.7937	0.8492	0.4643	5.0%	7.6%	4.3%	6.5%	2.43
46 Desjardins Melodia D	iversified Income Portfolio	D	0.50%	1.41%	0.31	-0.15%	0.66	0.6664	0.7421	0.8109	0.6404	4.3%	7.8%	4.7%	N/A	2.24
47 Counsel Income Mana	aged Portfolio	D	0.45%	1.35%	0.29	0.02%	0.81	0.7609	0.6776	0.7319	0.5310	4.0%	6.7%	3.6%	5.5%	2.90
48 CIBC Managed Month	nly Income Balanced Portfolio	D	0.40%	1.15%	0.29	0.00%	0.73	0.8179	0.6397	0.7404	0.5111	2.7%	4.5%	2.7%	4.8%	2.21
49 Counsel Managed Po	rtfolio	D	0.47%	1.46%	0.28	-0.10%	0.58	0.8016	0.6865	0.7299	0.3936	4.2%	6.9%	3.2%	5.6%	2.96
_	Ioderate Income Portfolio	D	0.38%	1.20%	0.27	-0.16%	0.56	0.5836	0.7181	0.7859	0.7624	3.0%	5.7%	3.5%	N/A	2.09
51 Counsel Managed Hig		D	0.41%	1.41%	0.24	-0.18%	0.60	0.4919	0.6230	0.7445	0.7506	2.4%	5.0%	3.6%	4.9%	2.76
	anced Growth Portfolio Ser A	D	0.39%	1.50%	0.22	-0.20%	0.60	0.7856	0.6222	0.7338	0.5433	4.7%	7.3%	3.2%	4.7%	2.28
53 Invesco Intactive Bala	anced Income Portfolio Ser A	D	0.31%	1.32%	0.19	-0.22%	0.55	0.6666	0.5997	0.7188	0.7257	3.8%	5.3%	2.9%	3.7%	2.15
54 BMO Balanced Yield I	Plus ETF Portfolio	D	0.31%	1.34%	0.19	-0.18%	0.50	0.6767	0.5787	0.6821	0.4943	3.4%	6.0%	2.1%	3.7%	1.70
55 TD Target Return Bala	anced Fund	D	0.06%	1.57%	0.00	-0.16%	0.22	0.7512	0.1658	0.3240	0.1470	1.4%	2.1%	-0.7%	N/A	2.25
	lobal Balanced Portfolio	F	0.73%	1.62%	0.41	-0.06%	0.81	0.5265	0.8743	0.9131	0.5430	4.8%	10.6%	6.2%	9.0%	2.51
57 Sun Life Granite Bala		F	0.74%	1.65%	0.41	-0.07%	0.83	0.5176	0.8607	0.9062	0.5995	5.6%	10.3%	6.5%	9.0%	0.00
58 TD Mgd Index Balance	· · ·	F	0.70%	1.62%	0.39	-0.10%	0.82	0.5644	0.8583	0.9009	0.6204	5.3%	8.8%	6.1%	8.6%	1.60

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							Correlations					_			
Name	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER
59 TD Mgd Balanced Growth Portfolio	F	0.70%	1.64%	0.39	-0.11%	0.83	0.5429	0.8858	0.8977	0.5683	5.3%	8.6%	5.5%	8.6%	2.22
60 Manulife Simplicity Balanced Fund	F	0.65%	1.53%	0.38	-0.09%	0.76	0.5866	0.8562	0.8944	0.5486	4.6%	9.7%	5.8%	7.9%	2.51
61 DynamicEdge Balanced Growth Class Portfolio	F	0.73%	1.77%	0.38	-0.08%	0.83	0.4939	0.8295	0.8551	0.4522	5.2%	12.8%	6.5%	8.9%	2.36
62 DynamicEdge Balanced Growth Portfolio	F	0.73%	1.77%	0.38	-0.08%	0.83	0.4927	0.8331	0.8578	0.4558	5.0%	12.3%	6.4%	8.9%	2.34
63 BMO SelectTrust Balanced Portfolio	F	0.68%	1.63%	0.38	-0.11%	0.81	0.5240	0.8623	0.8702	0.5961	5.7%	9.8%	6.1%	8.3%	2.21
64 TD Mgd Inc & Mod Growth Portfolio	F	0.57%	1.37%	0.37	-0.11%	0.69	0.4951	0.8600	0.8745	0.6686	4.1%	6.9%	4.5%	7.0%	2.08
65 TD Mgd Income & Moderate Growth Portfolio	F	0.57%	1.37%	0.37	-0.11%	0.69	0.4951	0.8600	0.8745	0.6686	4.1%	6.9%	4.5%	7.0%	2.08
66 TD Mgd Index Income & Moderate Growth Portfolio	F	0.59%	1.43%	0.37	-0.11%	0.72	0.5234	0.8173	0.8715	0.7187	4.1%	6.9%	5.0%	7.2%	1.53
67 Fidelity Balanced Portfolio	F	0.65%	1.60%	0.37	-0.12%	0.80	0.4656	0.8233	0.8632	0.6928	4.9%	7.2%	5.4%	8.0%	2.45
68 CIBC Managed Balanced Portfolio	F	0.60%	1.47%	0.37	-0.12%	0.73	0.5537	0.8567	0.8931	0.5887	4.1%	7.5%	4.9%	7.3%	2.25
69 Symmetry Moderate Growth Portfolio	F	0.64%	1.61%	0.36	-0.10%	0.77	0.6137	0.8796	0.8562	0.4203	4.7%	8.9%	5.0%	7.9%	2.25
70 Counsel Balanced Portfolio	F	0.62%	1.57%	0.36	-0.13%	0.78	0.5010	0.8346	0.8949	0.6127	4.1%	9.4%	5.1%	7.6%	2.86
71 BMO FundSelect Balanced Portfolio Series A	F	0.61%	1.55%	0.35	-0.14%	0.77	0.5449	0.8815	0.8759	0.5512	5.0%	9.6%	5.3%	7.4%	2.59
72 Desjardins Chorus II Growth Fund	F	0.62%	1.58%	0.35	-0.12%	0.76	0.6039	0.7684	0.8821	0.6209	4.7%	10.6%	5.4%	7.5%	2.01
73 SEI Balanced 60/40 Fund Class - P	F	0.60%	1.53%	0.35	-0.13%	0.74	0.6449	0.8322	0.8783	0.5583	4.7%	7.7%	4.9%	7.3%	0.00
74 TD Advantage Balanced Portfolio	F	0.52%	1.31%	0.35	-0.11%	0.64	0.5571	0.8260	0.8405	0.6645	4.2%	6.0%	3.9%	6.3%	2.07
75 CI Portfolio Series Conservative Fund Class A	F	0.52%	1.34%	0.34	-0.14%	0.68	0.4713	0.8682	0.8767	0.6535	2.8%	5.3%	3.8%	6.4%	2.32
76 Scotia INNOVA Balanced Income Portfolio	F	0.47%	1.19%	0.34	-0.10%	0.58	0.5095	0.8257	0.8330	0.6783	3.7%	6.6%	4.1%	5.7%	1.94
77 AGF Elements Balanced Portfolio	F	0.65%	1.74%	0.34	-0.20%	0.87	0.5337	0.8876	0.8949	0.5315	5.5%	9.2%	5.9%	7.8%	2.34
78 Franklin Quotential Balanced Growth Portfolio A	F	0.63%	1.69%	0.33	-0.20%	0.72	0.5735	0.8495	0.9150	0.4821	4.8%	7.8%	4.5%	7.6%	2.32
79 Desjardins Chorus II Growth Corporate Class	F	0.59%	1.59%	0.33	-0.13%	0.73	0.6720	0.7588	0.8596	0.5341	4.6%	10.3%	5.0%	7.1%	2.06
80 BMO SelectClass Balanced Portfolio Series A	F	0.59%	1.63%	0.33	-0.19%	0.80	0.5407	0.8549	0.8625	0.5888	5.9%	9.6%	5.5%	7.2%	2.50
81 Desjardins Chorus II Balanced Growth Fund	F	0.53%	1.43%	0.32	-0.14%	0.69	0.5820	0.7579	0.8641	0.6762	4.3%	8.0%	4.5%	6.4%	1.88
82 BMO Balanced ETF Portfolio Class	F	0.60%	1.65%	0.32	-0.16%	0.78	0.6136	0.7822	0.8503	0.5631	5.5%	9.0%	5.9%	7.2%	1.72
83 Desjardins Chorus II Balanced Growth Corp. Class	F	0.51%	1.39%	0.32	-0.13%	0.65	0.6511	0.7557	0.8531	0.5960	4.4%	8.9%	4.4%	6.2%	1.91
84 Franklin Quotential Balanced Income Portfolio A	F	0.50%	1.42%	0.31	-0.19%	0.70	0.5213	0.8261	0.9045	0.6054	3.5%	6.1%	3.8%	6.0%	2.12
85 Desjardins Melodia Balanced Growth Portfolio	F	0.55%	1.62%	0.30	-0.23%	0.81	0.6132	0.7994	0.8926	0.6357	5.0%	10.8%	5.4%	N/A	2.31
86 AGF Elements Conservative Portfolio	F	0.51%	1.49%	0.30	-0.22%	0.75	0.4181	0.8607	0.8718	0.6598	4.2%	6.8%	5.0%	6.2%	2.34
87 Desjardins Melodia Diversified Growth Portfolio	F	0.47%	1.47%	0.28	-0.23%	0.72	0.5912	0.7759	0.8730	0.7004	4.2%	9.2%	4.7%	N/A	2.22
88 Desjardins Melodia Moderate Growth Portfolio	F	0.42%	1.34%	0.27	-0.22%	0.66	0.5485	0.7588	0.8495	0.7674	3.4%	7.4%	3.9%	N/A	2.15
Category Average		0.57%	1.45%	0.35	-0.04%	0.74	0.5998	0.7927	0.8311	0.5666	4.3%	7.8%	4.8%	7.1%	1.94
Growth Portfolios	Typical Asse	et Mix: 10% -	- 30% Fixed I	ncome / 7	0% - 90%	Equity									
1 Meritas Growth Portfolio	А	0.79%	1.67%	0.43	0.36%	0.79	0.5993	0.8883	0.8511	0.3948	5.9%	8.3%	7.0%	9.7%	2.49
2 Empire Life Emblem Growth Portfolio	Α	0.75%	1.68%	0.41	0.28%	0.76	0.7536	0.7719	0.7488	0.2603	6.1%	6.9%	5.8%	9.1%	2.40
3 Sun Life Granite Growth Portfolio Series A	В	0.88%	1.93%	0.43	0.19%	1.25	0.5330	0.8713	0.9109	0.5500	6.3%	11.5%	7.4%	10.9%	0.00
4 Counsel Growth Portfolio	В	0.78%	1.84%	0.39	0.14%	1.15	0.5318	0.8502	0.9025	0.5200	5.1%	11.9%	6.1%	9.6%	2.98
5 DynamicEdge Growth Portfolio	В	0.87%	2.09%	0.39	0.21%	1.19	0.4802	0.8360	0.8484	0.4188	6.1%	15.3%	7.8%	10.7%	2.43
6 DynamicEdge Growth Class Portfolio	В	0.87%	2.09%	0.39	0.21%	1.19	0.4818	0.8351	0.8513	0.4177	6.0%	15.5%	7.8%	10.7%	2.45

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									Correlations				Returns				
Nam	ne	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	- MER	
						•											
7	Meritage Equity Income Portfolio	В	0.64%	1.53%	0.38	0.20%	0.72	0.7728	0.7029	0.7502	0.3386	5.2%	9.7%	5.8%	7.9%	2.57	
8	Axiom Long-Term Growth Portfolio	В	0.66%	1.66%	0.36	0.13%	0.86	0.8484	0.6766	0.7678	0.3545	5.6%	10.5%	5.4%	8.0%	2.37	
9	Counsel World Managed Portfolio	С	0.58%	1.57%	0.33	0.05%	0.96	0.6176	0.8211	0.8582	0.5109	4.5%	9.5%	3.9%	7.0%	3.12	
10	BMO Matchmaker Strategic Growth Portfolio	D	0.84%	1.77%	0.44	0.02%	0.71	0.6494	0.8493	0.8105	0.4404	7.0%	10.4%	6.9%	10.3%	0.00	
11	Scotia Partners Growth Portfolio	D	0.80%	1.69%	0.43	0.00%	0.69	0.6193	0.8701	0.8393	0.4378	5.4%	11.1%	6.6%	9.8%	2.35	
12		D	0.85%	1.83%	0.43	-0.04%	0.78	0.5492	0.8573	0.8857	0.5517	6.4%	10.4%	6.8%	10.5%	2.48	
13	SEI Growth 80/20 Class S	D	0.83%	1.82%	0.42	-0.04%	0.75	0.6693	0.8557	0.8778	0.4124	6.2%	10.9%	7.1%	10.3%	1.89	
14	Sun Life Granite Balanced Growth Port A (CAD)	D	0.78%	1.74%	0.41	-0.09%	0.75	0.5198	0.8635	0.9047	0.5795	4.9%	9.2%	6.3%	9.6%	0.00	
15		D	0.84%	1.93%	0.40	-0.10%	0.81	0.5803	0.8942	0.8740	0.4413	6.6%	12.8%	7.2%	10.3%	2.69	
16	CI Portfolio Series Growth Fund Class A	D D	0.82%	1.90%	0.40	-0.06%	0.76	0.6533	0.8691	0.8443	0.3133	4.9%	9.8%	6.2%	10.1%	2.44	
17	TD Advantage Growth Portfolio	_	0.76%	1.74%	0.40	-0.06%	0.72	0.6674	0.8582	0.8520	0.4097	6.6%	9.6%	5.6%	9.4%	2.27	
18	CI Portfolio Series Balanced Growth Fund Class A	D	0.76%	1.74%	0.40	-0.08%	0.73	0.6217	0.8852	0.8687	0.4008	4.5%	9.4%	5.9%	9.3%	2.45	
19	CI Portfolio Series Balanced Fund Class A	D	0.68%	1.57%	0.39	-0.10%	0.67	0.5665	0.9009	0.8754	0.4803	3.9%	7.7%	5.1%	8.3%	2.43	
20	Sun Life Granite Moderate Portfolio Series A	D D	0.62%	1.43%	0.39	-0.08%	0.72	0.4906	0.8399	0.8914	0.6536	4.2%	8.0%	5.3%	7.6%	0.00	
21	Marquis Growth Portfolio	D	0.83%	1.96%	0.39	-0.08%	0.79	0.5901	0.8480	0.8466	0.3658	6.2%	12.2%	6.3%	10.2%	2.54	
22	Axiom Canadian Growth Portfolio Invesco Intactive Growth Portfolio Series A	D	0.53% 0.48%	1.70% 1.73%	0.27	-0.05%	0.95	0.9563	0.4219 0.6230	0.5098	0.1429 0.3505	4.8% 5.6%	7.2%	3.5%	6.4% 5.7%	2.32	
23		D			0.24	-0.17%	0.56	0.8428		0.7174			9.4%	3.6%		2.34	
24	Dynamic Diversified Real Asset Fund	D F	0.31%	3.30%	0.08	-0.36%	1.10	0.5061	-0.0286	0.1439	0.4716	1.2%	1.8%	7.4%	3.1%	2.41	
25	TD Mgd Index Aggressive Growth Portfolio	F	0.87%	1.93%	0.42	-0.09%	0.83	0.6247	0.8751	0.9111	0.4867	6.8%	11.5%	7.5%	10.7%	1.63	
26	TD Mgd Aggressive Growth Portfolio	F	0.85%	1.91% 2.23%	0.41 0.41	-0.10% -0.14%	0.82 0.96	0.5758	0.8988 0.8840	0.9004 0.8974	0.4724 0.5616	6.4% 7.5%	10.4% 13.9%	6.5% 8.4%	10.4%	2.31 2.50	
27	Fidelity Global Growth Portfolio	F	0.97%					0.4122							12.0%		
28	Manulife Simplicity Growth Portfolio	F	0.79%	1.81%	0.40	-0.10%	0.77	0.6027	0.8680	0.8993	0.4592	5.6%	12.2%	7.0%	9.7%	2.64	
29	Axiom Global Growth Portfolio BMO SelectClass Growth Portfolio Series A	F	0.86% 0.85%	2.03% 2.02%	0.39	-0.15%	0.88	0.5279	0.8741 0.8845	0.9195	0.5071 0.5208	7.0%	14.7% 12.2%	7.9%	10.5% 10.4%	2.43	
30		F F			0.39	-0.14%	0.86	0.5257		0.8758	0.5208	7.3%		7.8%		2.61	
31	Axiom Foreign Growth Portfolio	F	1.05%	2.54%	0.39	-0.23%	1.11	0.3570	0.9005	0.9184		8.4%	18.2%	10.0%	12.9%	2.42	
32	SEI Growth 80/20 Fund Class - P	F	0.77%	1.82%	0.39	-0.10%	0.75	0.6696	0.8557	0.8778	0.4125	6.0%	10.0%	6.2%	9.4%	0.00	
33	CIBC Managed Balanced Growth Portfolio	F	0.75%	1.81%	0.38	-0.14%	0.77	0.5285	0.8613 0.8780	0.8977	0.5743	5.3%	10.6%	6.6%	9.2%	2.46	
34	Symmetry Growth Portfolio	F	0.77%	1.91%	0.37	-0.13%	0.78	0.6245		0.8531	0.3350	6.0%	11.0%	5.8%	9.4%	2.44	
35	Desjardins Chorus II High Growth Fund	F	0.72% 0.75%	1.83%	0.36	-0.15%	0.75 0.81	0.6276	0.7915 0.8312	0.8949	0.5342 0.6952	5.7% 5.8%	12.4%	6.1% 6.7%	8.7% 9.1%	2.21 2.46	
36	Fidelity Global Balanced Portfolio	F		1.94%	0.35	-0.19%		0.3270		0.8698			9.8%				
37	Franklin Quotential Growth Portfolio A	F	0.76%	2.01%	0.34	-0.22%	0.84	0.5772	0.8619 0.7710	0.9117	0.3962	6.1%	9.5%	5.4%	9.2% 8.3%	2.42	
38	Desjardins Chorus II High Growth Corp. Class	•	0.68%	1.82%	0.34	-0.15%	0.72	0.6904		0.8659	0.4601	5.7%	11.8%	5.6%		2.25	
39	AGF Elements Growth Portfolio	F F	0.81%	2.21%	0.34	-0.30%	0.96	0.4687	0.9146	0.9003	0.4607	7.1%	12.0%	7.9%	9.9%	2.33	
40	Desjardins Melodia Maximum Growth Portfolio	F	0.73%	2.05%	0.33	-0.27%	0.87	0.6435	0.8227	0.9074	0.5164	7.0%	14.5%	7.1%	N/A	2.56	
41	Quadrus Advanced Folio	F F	0.66%	1.84%	0.33	-0.15%	0.70	0.7816	0.7843	0.8230	0.3353	6.4%	9.4%	5.1%	8.1%	2.48	
42	Desjardins Melodia Aggressive Growth Portfolio	F	0.67%	1.87%	0.32	-0.25%	0.79	0.6387	0.8141	0.9037	0.5557	6.2%	13.1%	6.4%	N/A	2.47	
43	Renaissance Optimal Inflation Opportunities Portfolic	ŀ	0.42%	1.82%	0.20	-0.25%	0.68	0.3433	0.4835	0.6929	0.7302	0.6%	4.7%	2.6%	4.9%	2.27	
	Category Average		0.75%	1.89%	0.37	-0.06%	0.84	0.5964	0.8027	0.8361	0.4591	5.7%	10.7%	6.4%	9.2%	2.15	

Aggressive Growth Portfolios

Typical Asset Mix: 0% - 20% Fixed Income / 80% - 100% Equity

November 2017

								Correlations								
			Average	Monthly							Cdn.					•
			Monthly	Standard	Sharpe					MSCI	Universe					
Nar	ne	Rating	Return	Deviation	Ratio	Alpha	Beta	TSX	S&P 500	EAFE	Bond	3 Month	1 Year	3 Year	5 Year	MER
1	Empire Life Emblem Aggressive Growth Portfolio	Α	0.87%	1.99%	0.40	0.37%	0.69	0.7631	0.7576	0.7289	0.1756	7.1%	8.4%	6.7%	10.7%	2.55
2	Quadrus Aggressive Folio	В	0.80%	2.22%	0.33	0.22%	0.80	0.7933	0.7706	0.7993	0.2380	7.4%	11.3%	6.1%	9.8%	2.47
3	Scotia Partners Maximum Growth Portfolio	D	0.91%	1.94%	0.43	-0.01%	0.79	0.6217	0.8779	0.8295	0.3713	6.3%	12.5%	7.2%	11.2%	2.46
4	SEI Growth 100 Class S	D	1.00%	2.16%	0.43	-0.04%	0.71	0.6735	0.8566	0.8662	0.3103	7.6%	13.2%	8.4%	12.3%	1.87
5	Counsel All Equity Portfolio	D	0.95%	2.13%	0.41	-0.09%	0.71	0.5430	0.8543	0.9003	0.4513	6.2%	14.7%	7.4%	11.7%	3.09
6	TD Advantage Aggressive Growth Portfolio	D	0.89%	2.02%	0.41	-0.06%	0.66	0.6916	0.8506	0.8350	0.3160	7.7%	11.5%	6.5%	11.0%	2.27
7	CI Portfolio Series Maximum Growth Fund Class A	D	0.95%	2.18%	0.41	-0.07%	0.71	0.6575	0.8638	0.8239	0.2492	5.7%	11.6%	7.3%	11.8%	2.43
8	DynamicEdge Equity Class Portfolio	D	1.07%	2.47%	0.41	-0.10%	0.80	0.4735	0.8380	0.8456	0.3825	7.6%	19.0%	9.6%	13.2%	2.46
9	DynamicEdge Equity Portfolio	D	1.06%	2.48%	0.40	-0.11%	0.81	0.4659	0.8412	0.8447	0.3858	7.5%	18.7%	9.5%	13.1%	2.44
10	Invesco Intactive Maximum Growth Portfolio Ser A	D	0.66%	2.07%	0.29	-0.11%	0.53	0.8375	0.6300	0.6915	0.1571	6.5%	11.5%	4.3%	7.9%	2.42
11	TD U.S. Equity Portfolio	F	1.60%	3.28%	0.47	-0.23%	1.08	0.2914	0.9723	0.7681	0.3673	11.3%	17.9%	13.8%	20.3%	2.40
12	TD Mgd Index Max Eqty Growth Portfolio	F	1.05%	2.29%	0.43	-0.09%	0.78	0.6467	0.8796	0.9040	0.3902	8.4%	14.2%	9.0%	13.1%	1.68
13	BMO FundSelect Equity Growth Portfolio Series A	F	1.05%	2.34%	0.42	-0.10%	0.79	0.5769	0.8963	0.8675	0.3786	8.1%	16.1%	9.0%	12.9%	2.85
14	TD Mgd Max Equity Growth Portfolio	F	0.97%	2.19%	0.41	-0.13%	0.75	0.5875	0.9007	0.8983	0.4032	7.5%	12.0%	7.4%	12.0%	2.46
15	BMO SelectClass Equity Growth Portfolio Series A	F	1.02%	2.34%	0.41	-0.14%	0.80	0.5108	0.8996	0.8808	0.4649	8.6%	15.5%	9.1%	12.6%	2.71
16	Axiom All Equity Portfolio	F	1.03%	2.42%	0.40	-0.17%	0.82	0.5577	0.8692	0.9088	0.4236	8.4%	18.8%	9.6%	12.7%	2.43
17	Marquis Equity Portfolio	F	0.98%	2.33%	0.39	-0.12%	0.75	0.5803	0.8496	0.8384	0.3197	7.6%	14.8%	7.4%	12.1%	2.68
18	CIBC Managed Aggressive Growth Portfolio	F	0.94%	2.26%	0.39	-0.19%	0.78	0.5119	0.8849	0.9089	0.4948	7.2%	14.6%	8.6%	11.6%	2.48
19	Desjardins Chorus II Maximum Growth Fund	F	0.80%	2.00%	0.37	-0.15%	0.82	0.6288	0.8016	0.8997	0.4971	6.5%	13.7%	6.7%	9.8%	2.27
20	Symmetry Equity Portfolio	F	0.93%	2.36%	0.36	-0.22%	0.78	0.6072	0.8808	0.8435	0.2654	7.5%	14.2%	7.1%	11.3%	2.47
21	Desjardins Chorus II Maximum Growth Corp. Class	F	0.76%	1.98%	0.35	-0.14%	0.78	0.6961	0.7756	0.8645	0.4172	6.3%	13.1%	6.3%	9.3%	2.30
22	AGF Elements Global Portfolio	F	0.98%	2.59%	0.35	-0.34%	0.90	0.4465	0.9237	0.8973	0.4114	8.6%	14.7%	9.4%	11.9%	2.50
23	Franklin Quotential Global Growth Portfolio A	F	0.95%	2.54%	0.35	-0.31%	0.87	0.5117	0.8816	0.9158	0.3497	7.6%	12.4%	6.8%	11.6%	2.58
24	BMO Equity Growth ETF Portfolio Fund	F	0.88%	2.38%	0.35	-0.21%	0.75	0.6578	0.8084	0.8314	0.3277	8.6%	16.0%	8.5%	10.8%	1.77
	Category Average		0.96%	2.29%	0.39	-0.11%	0.78	0.5972	0.8485	0.8497	0.3562	7.6%	14.2%	8.0%	11.9%	2.42

Methodology & Ratings Definitions

November 2017

Methodology:

Fund Ratings which are highlighted in Green indicate an upgraded rating from the previous month. Fund Ratings highlighted in Red indicate a downgraded rating from the previous month. Only funds with greater than 36 months of data are eligible to receive a rating.

The period under review is the most recent 60 month period, or the inception date of the fund, whichever is shorter.

To determine our rankings, fund returns are scored on six key risk reward metrics. The scores are totaled and a rating assigned based on the results.

Fund Score	Rating
More than 80%	A
65% to 80%	В
55% to 65%	С
40% to 55%	D
Below 40%	F

The metrics are:

- Alpha This is the excess return that a manager has been able to generate. The higher the Alpha, the higher the score.
- **Sharpe Ratio** This is a measure of risk adjusted performance. It measures how much return an investment has delivered for each unit of risk assumed. The higher the Sharpe Ratio, the more return the investment has delivered for each unit of risk.
- **Standard Deviation** this is a measure of volatility or risk. It measures the fluctuation that an investment has exhibited. The higher the standard deviation, the more fluctuation the fund has shown, so the lower the score it receives in the ratings model
- **Information Ratio** is a measure of how consistently a manager has outperformed its benchmark. It is basically the Sharpe Ratio of the monthly excess returns. Like with the Sharpe Ratio, the higher the better.
- Batting Average this is another measure of how consistently the fund has outperformed. While the information ratio will factor in the level of outperformance, batting average is a measure of how frequently. It's like the win/loss percentage in baseball. A batting average of 500 means it has outperformed as often as it has underperformed. The model favours funds that win more than they lose. The higher the batting average, the better the score.
- R-Squared This is a statistical measure that shows how much of the return of an investment are the result of the benchmark. The higher the R-Square, the more the fund behaves like the benchmark. And as we know, if you want to beat the benchmark, you can't be the benchmark. The model favours those funds that have a lower R-Squared.

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Information is from sources believed to be reliable. Every effort is made to ensure its accuracy, however, we cannot be responsible for inaccuracies or omissions in any of the data.

Information used in this analysis is historic in nature. Past performance is no guarantee of future performance.

Monthly Standard Deviation is the most recent 60 month historical standard deviation of returns.

Sharpe Ratio is a measure of risk adjusted returns. The higher the ratio, the better the manager has been at delivering more return for less risk.

Alpha represents the excess return which the manager has been able to deliver over and above the applicable benchmark.

Beta represents the volatility of the fund relative to its applicable benchmark. A beta of one means that there is a level of volatility equal that of the benchmark. A beta in excess of one indicates that the volatility is greater than the benchmark, while a beta of less than one indicates that volatility is less than the benchmark.

Correlation measures the similarity in return patterns between the fund and a benchmark. The correlation will range between -1 and +1. A correlation close to +1 indicates that the fund and the index have very similar return patters. A correlation close to -1 indicates that the returns are almost opposite, while a correlation close to zero indicates no relationship.

Historic returns are calculated using the monthly return data in our database. Slight variations in return results will be attributable to decimal rounding and number truncation. Past performance does not guarantee future performance.

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