Paterson & Associates

December 2018

Monthly WRAP Fund Report

Prepared January 14, 2019

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December 2018

								Correl	ations			Ret	urns		
		Average Monthly	Monthly Standard	Sharpe					MSCI	Cdn. Universe					
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	t Mix: 70% -	90% Fixed In	come / 109	% - 30% E	quity									
RBC Strategic Monthly Income Bond	С	0.36%	1.14%	0.26	0.06%	1.00	0.2347	0.5243	0.6827	0.7450	1.0%	-0.6%	3.1%	4.4%	1.83
2 Scotia Partners Balanced Income Portfolio	С	0.30%	1.01%	0.23	0.04%	0.83	0.5504	0.7938	0.7933	0.7202	-1.7%	-1.4%	2.4%	3.5%	2.14
3 Scotia Select Balanced Income	С	0.30%	1.08%	0.22	0.04%	0.86	0.5378	0.8326	0.8164	0.7005	-1.9%	-1.4%	2.0%	3.6%	1.88
4 Scotia Selected Income Portfolio	С	0.27%	0.96%	0.22	0.02%	0.80	0.4709	0.7502	0.7502	0.7906	-0.8%	-0.7%	1.7%	3.3%	1.77
5 Marquis Balanced Income Portfolio	С	0.31%	1.22%	0.20	0.02%	0.91	0.7283	0.7911	0.7961	0.4889	-4.0%	-3.3%	3.2%	3.6%	2.27
6 DynamicEdge Defensive Portfolio	С	0.20%	0.83%	0.16	0.00%	0.63	0.4614	0.7796	0.8013	0.6984	-1.0%	-0.8%	1.5%	2.4%	1.96
7 Scotia Partners Income Portfolio	D	0.27%	0.86%	0.23	0.01%	0.59	0.5291	0.7171	0.7514	0.7541	-0.8%	-1.2%	2.1%	3.2%	2.04
8 DynamicEdge Conservative Class Portfolio	D	0.28%	1.14%	0.19	-0.05%	0.75	0.5068	0.8552	0.8503	0.5799	-2.8%	-1.3%	2.2%	3.3%	1.94
9 RBC Select Very Conservative Portfolio	D	0.25%	0.98%	0.19	-0.01%	0.83	0.5196	0.7644	0.7855	0.7763	-1.6%	-2.0%	1.8%	3.0%	1.69
10 Scotia INNOVA Income Portfolio	D	0.23%	0.88%	0.19	0.00%	0.73	0.4229	0.7365	0.7371	0.8310	-0.9%	-0.8%	1.6%	2.7%	1.85
11 Symmetry Conservative Income Portfolio	D	0.24%	0.94%	0.19	0.00%	0.78	0.5342	0.7758	0.7755	0.7430	-2.6%	-2.5%	2.0%	2.9%	1.86
12 SEI Income 20/80 Class S	D	0.24%	0.94%	0.19	-0.02%	0.82	0.4655	0.6951	0.7399	0.8561	-1.0%	-0.6%	1.7%	2.8%	1.43
13 Fidelity Income Portfolio	D	0.32%	1.38%	0.18	-0.02%	1.08	0.3948	0.8006	0.8055	0.7797	-2.5%	-1.4%	1.4%	3.8%	2.37
14 SEI Conservative Monthly Income Class S	D	0.24%	1.00%	0.18	-0.02%	0.86	0.5737	0.7569	0.7765	0.7603	-2.4%	-2.0%	2.0%	2.9%	1.70
15 RBC Managed Payout Solution	D	0.24%	0.96%	0.18	-0.01%	0.78	0.7818	0.7126	0.6888	0.5439	-2.5%	-2.5%	2.7%	2.8%	1.62
16 TD Mgd Income Portfolio	D	0.26%	1.12%	0.17	-0.02%	0.90	0.4487	0.8348	0.8273	0.7652	-1.9%	-1.2%	1.4%	3.1%	1.84
17 Manulife Simplicity Moderate Portfolio	D	0.29%	1.33%	0.17	-0.04%	1.04	0.5987	0.8479	0.8651	0.6298	-4.7%	-4.2%	1.9%	3.4%	2.13
18 Meritage Moderate Portfolio	D	0.26%	1.15%	0.17	-0.04%	0.93	0.6460	0.8302	0.8051	0.6417	-3.8%	-3.2%	2.1%	3.0%	2.14
19 BMO Select Trust Income Portfolio	D	0.26%	1.17%	0.16	-0.04%	0.95	0.4253	0.8302	0.7968	0.7968	-2.2%	-2.1%	1.2%	3.0%	1.87
20 Meritage Moderate Income Portfolio	D	0.24%	1.09%	0.16	-0.04%	0.89	0.4233	0.7652	0.7551	0.7908	-2.2%	-2.1%	2.3%	2.9%	2.11
_	D	0.24%	1.12%	0.16	-0.04%	0.89	0.5303	0.7778	0.7331	0.6731	-3.5%	-3.3%	1.7%	2.8%	2.11
· ·	D	0.24%	0.88%	0.16	-0.03%	0.87	0.5303	0.7625	0.8103	0.8113	-2.7% -1.1%	-2.3% -1.0%	1.7%	2.4%	1.80
S															
23 BMO Income ETF Portfolio Advisor Class	D	0.24%	1.16%	0.15	-0.06%	0.97	0.4405	0.7434	0.7713	0.8141	-1.4%	-1.7%	1.1%	2.9%	1.67
24 Desjardins Chorus II Balanced Income Fund	D	0.26%	1.31%	0.15	-0.07%	1.06	0.5823	0.8005	0.8508	0.6847	-3.6%	-3.5%	1.9%	3.1%	1.81
25 Desjardins Chorus II Conservative Fund	D	0.23%	1.13%	0.15	-0.07%	0.95	0.5325	0.7615	0.8188	0.7581	-2.6%	-2.8%	1.6%	2.7%	1.73
26 TD Advantage Balanced Income Portfolio	D	0.23%	1.18%	0.14	-0.07%	0.98	0.4865	0.8055	0.7787	0.7813	-2.5%	-2.6%	0.9%	2.7%	1.98
27 National Bank Conservative Strategy Portfolio	D	0.21%	1.02%	0.14	-0.05%	0.81	0.6651	0.8105	0.8138	0.5994	-4.0%	-2.5%	2.0%	2.5%	1.75
28 National Bank Conservative Diversified	D	0.19%	0.99%	0.13	-0.06%	0.82	0.5432	0.7877	0.7501	0.7367	-3.4%	-1.8%	1.2%	2.3%	1.91
29 Quadrus Moderate Folio	D	0.20%	1.15%	0.11	-0.10%	0.96	0.6449	0.7894	0.8246	0.6648	-2.5%	-2.7%	1.6%	2.3%	2.36
30 National Bank Income Managed Portfolio	D	0.15%	1.11%	0.07	-0.08%	0.73	0.8253	0.7076	0.7045	0.3034	-5.3%	-3.8%	2.1%	1.7%	0.00
31 National Bank Stable Income Managed Portfolio	D	0.08%	0.75%	0.02	-0.08%	0.50	0.7618	0.6181	0.6329	0.3649	-4.2%	-3.6%	1.2%	0.9%	0.00
32 TD Target Return Conservative Fund	D	-0.01%	1.24%	-0.06	-0.17%	0.37	0.7808	0.4484	0.4709	0.1951	-4.9%	-5.7%	1.2%	-0.2%	1.70
33 CI Portfolio Series Income Fund Class A	F	0.29%	1.17%	0.20	-0.08%	0.83	0.3224	0.7568	0.8101	0.7790	-0.7%	-1.8%	1.8%	3.5%	2.01
34 Fidelity Global Income Portfolio	F	0.38%	1.64%	0.19	-0.14%	1.18	0.2708	0.7962	0.8095	0.7700	-2.1%	-0.8%	1.5%	4.5%	2.36
35 TD Mgd Index Income Portfolio	F	0.30%	1.26%	0.19	-0.11%	0.93	0.4546	0.7737	0.7969	0.8252	-1.8%	-1.4%	1.7%	3.6%	1.49
36 Sun Life Granite Conservative Portfolio Series A	F	0.27%	1.19%	0.17	-0.11%	0.85	0.4688	0.7954	0.8414	0.7537	-2.2%	-2.1%	1.6%	3.2%	0.00
37 AGF Elements Yield Portfolio	F	0.29%	1.31%	0.17	-0.11%	0.89	0.3585	0.7473	0.8126	0.7114	-1.3%	-1.9%	1.7%	3.4%	2.03
38 Renaissance Optimal Conservative Income Portfolio	o F	0.23%	1.00%	0.16	-0.04%	0.86	0.4400	0.6410	0.6967	0.8608	-1.4%	-1.8%	1.5%	2.7%	1.62

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								Corre	lations			Ret	urns		
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
39 Symmetry Conservative Portfolio	F	0.24%	1.11%	0.16	-0.09%	0.75	0.5890	0.8398	0.8262	0.6437	-3.4%	-3.4%	1.8%	2.9%	2.16
40 Manulife Simplicity Conservative Portfolio	F	0.23%	1.09%	0.15	-0.06%	0.93	0.4615	0.7320	0.7717	0.8288	-2.2%	-2.6%	1.4%	2.7%	1.89
41 Renaissance Optimal Income Portfolio	F	0.24%	1.26%	0.14	-0.09%	1.07	0.6080	0.6662	0.7553	0.7240	-3.1%	-4.2%	1.7%	2.9%	1.98
42 Desjardins Melodia Conservative Income Portfolio	F	0.21%	1.05%	0.14	-0.11%	0.74	0.5193	0.7017	0.7559	0.7946	-2.3%	-3.1%	1.4%	2.5%	1.96
43 Meritage Conservative Portfolio	F	0.20%	0.98%	0.14	-0.05%	0.83	0.5004	0.7618	0.7698	0.7865	-2.3%	-2.5%	1.3%	2.4%	2.13
44 BMO FundSelect Income Portfolio Series A	F	0.21%	1.06%	0.14	-0.13%	0.77	0.4474	0.7969	0.8102	0.7820	-2.0%	-2.0%	1.2%	2.5%	2.42
45 TD Comfort Balanced Income Portfolio	F	0.21%	1.08%	0.13	-0.10%	0.48	0.6631	0.7860	0.7875	0.6715	-2.8%	-2.8%	1.5%	2.4%	1.75
46 Meritage Conservative Income Portfolio	F	0.18%	0.89%	0.13	-0.06%	0.77	0.5572	0.6903	0.6919	0.7849	-1.9%	-2.3%	1.6%	2.1%	2.11
47 Desjardins Melodia Very Conservative Income Por	t F	0.18%	0.97%	0.12	-0.12%	0.69	0.4375	0.6419	0.7036	0.8659	-1.7%	-2.6%	1.0%	2.2%	1.91
48 BMO SelectClass Income Portfolio Series A	F	0.21%	1.19%	0.12	-0.17%	0.86	0.4288	0.7741	0.7921	0.7993	-2.0%	-2.3%	0.7%	2.5%	2.33
49 Counsel Conservative Portfolio	F	0.22%	1.31%	0.12	-0.19%	0.92	0.4563	0.8119	0.8765	0.6990	-3.7%	-3.2%	1.0%	2.6%	2.42
50 TD Comfort Conservative Income	F	0.16%	0.87%	0.11	-0.08%	0.77	0.5523	0.7118	0.7273	0.8018	-1.8%	-2.1%	0.9%	1.9%	1.53
51 Quadrus Conservative Folio	F	0.18%	1.01%	0.11	-0.10%	0.88	0.5277	0.7082	0.7618	0.8046	-1.4%	-1.9%	1.3%	2.1%	2.24
52 SEI Income 100 Class S	F	0.15%	0.83%	0.11	-0.13%	0.92	0.1607	0.4101	0.4679	0.9837	0.5%	-0.3%	0.8%	1.8%	1.47
53 Invesco Intactive Diversified Income Portfolio	F	0.19%	1.24%	0.11	-0.16%	0.81	0.6537	0.6858	0.7425	0.7074	-3.9%	-4.6%	1.7%	2.3%	1.99
54 Empire Life Emblem Diversified Income Portfolio	F	0.16%	1.01%	0.10	-0.10%	0.85	0.4572	0.7620	0.7466	0.8295	-2.6%	-3.3%	0.4%	N/A	1.91
55 Empire Life Emblem Conservative Portfolio	F	0.18%	1.16%	0.10	-0.11%	0.94	0.6437	0.8246	0.7872	0.6424	-4.5%	-5.2%	0.2%	2.1%	2.06
56 Franklin Quotential Diversified Income Portfolio T	F	0.18%	1.15%	0.10	-0.18%	0.80	0.4525	0.7637	0.8414	0.7359	-1.9%	-2.6%	0.9%	2.0%	1.96
57 Counsel Managed Yield Portfolio	F	0.10%	1.08%	0.03	-0.17%	0.87	0.5000	0.5296	0.6513	0.7281	-1.2%	-2.7%	0.8%	1.1%	2.52
Category Average		0.23%	1.09%	0.15	-0.07%	0.84	0.5203	0.7430	0.7672	0.7178	-2.3%	-2.3%	1.6%	2.7%	1.85
Balanced Portfolios	Typical Asse	et Mix: 40% -	60% Fixed In	come / 40%	% - 60% E	quity									
Scotia Partners Balanced Growth Portfolio	А	0.37%	1.44%	0.21	0.17%	0.56	0.6576	0.8767	0.8400	0.5189	-4.3%	-2.5%	3.2%	4.4%	2.24
2 PH&N Balanced Fund Series D	В	0.50%	1.66%	0.26	0.20%	0.90	0.7335	0.8253	0.8449	0.5268	-5.1%	-2.9%	4.7%	6.0%	0.88
3 NEI Select Growth & Income RS Portfolio Series A	В	0.36%	1.54%	0.19	0.12%	0.73	0.6342	0.9054	0.8476	0.4665	-5.9%	-3.4%	2.3%	4.3%	2.41
4 Compass Balanced Portfolio	С	0.41%	1.38%	0.25	0.03%	0.59	0.7524	0.8272	0.7786	0.3777	-5.5%	-3.4%	4.0%	4.9%	1.90
5 SEI Income 40/60 Class S	С	0.31%	1.22%	0.20	0.00%	0.99	0.5860	0.8272	0.8513	0.6818	-2.6%	-1.3%	2.4%	3.7%	1.63
6 Meritage Growth Income Portfolio	С	0.31%	1.45%	0.17	0.04%	0.82	0.8216	0.8024	0.7366	0.3388	-6.0%	-5.1%	3.3%	3.7%	2.40
7 Meritage Balanced Income Portfolio	С	0.27%	1.24%	0.16	0.03%	0.69	0.7740	0.8109	0.7551	0.4689	-4.9%	-4.4%	2.6%	3.1%	2.39
8 Mawer Balanced Fund Class A	D	0.58%	1.68%	0.31	0.05%	0.81	0.4849	0.8992	0.8619	0.6037	-3.8%	-0.3%	4.2%	7.0%	0.92
9 BMO Matchmaker Strategic Balanced Portfolio	D	0.38%	1.42%	0.22	-0.05%	0.66	0.6436	0.8669	0.8275	0.5598	-3.8%	-2.7%	2.9%	4.5%	0.00
10 Scotia Selected Balanced Growth	D	0.37%	1.46%	0.21	-0.07%	0.69	0.6416	0.8860	0.8631	0.5032	-4.7%	-3.2%	2.8%	4.4%	2.00
11 Renaissance Optimal Growth & Income Portfolio	D	0.34%	1.43%	0.19	-0.06%	0.63	0.6784	0.7960	0.7804	0.5817	-4.4%	-4.6%	2.6%	4.1%	2.04
12 CC&L Diversified Income Portfolio	D	0.33%	1.38%	0.19	-0.08%	0.63	0.6466	0.8659	0.8223	0.5368	-3.7%	-2.9%	1.8%	3.9%	0.00
13 Scotia INNOVA Balanced Income Portfolio	D	0.27%	1.07%	0.19	0.00%	0.85	0.5326	0.8496	0.8266	0.6936	-2.4%	-1.7%	1.9%	3.2%	1.97
14 Manulife Strategic Balanced Yield Portfolio	D	0.44%	2.02%	0.19	-0.04%	0.75	0.5915	0.8257	0.6422	0.1486	-10.4%	-10.3%	2.5%	5.2%	2.27
15 National Bank Moderate Strategic Portfolio	D	0.32%	1.40%	0.18	-0.01%	1.05	0.6607	0.8658	0.8440	0.5478	-5.1%	-2.5%	2.8%	3.8%	2.07
16 Axiom Balanced Income Portfolio	D	0.28%	1.24%	0.17	-0.05%	1.05	0.6480	0.7925	0.8114	0.6818	-3.5%	-3.2%	2.2%	3.3%	2.04

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									Correl	ations			Reti	ırns		
Nam	е	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
17	RBC Select Choices Conservative Portfolio	D	0.26%	1.18%	0.16	-0.04%	0.95	0.6536	0.8333	0.8268	0.6269	-3.3%	-3.3%	1.7%	3.1%	1.95
18	Desjardins Melodia Diversified Income Portfolio	D	0.29%	1.41%	0.16	-0.11%	0.62	0.6977	0.7714	0.8088	0.5499	-4.3%	-4.7%	2.5%	3.4%	2.24
19	National Bank Moderate Diversified	D	0.27%	1.28%	0.16	-0.06%	1.04	0.6413	0.8211	0.7815	0.6452	-4.3%	-1.8%	2.1%	3.2%	2.21
20		D	0.23%	1.16%	0.15	-0.10%	0.51	0.6119	0.7378	0.7890	0.6942	-3.0%	-3.7%	1.7%	2.8%	2.09
21	Meritage Balanced Portfolio	D	0.27%	1.39%	0.14	0.01%	0.76	0.7431	0.8289	0.8121	0.5082	-5.5%	-4.9%	2.2%	3.1%	2.42
22	Meritage Growth Portfolio	D	0.29%	1.63%	0.14	-0.01%	0.89	0.7802	0.8296	0.8078	0.3944	-6.7%	-5.7%	2.5%	3.4%	2.43
23	National Bank Income and Growth Managed Portfolio	D	0.23%	1.45%	0.12	-0.05%	0.89	0.8296	0.7308	0.7107	0.2369	-6.4%	-3.9%	3.3%	2.7%	0.00
24	BMO Balanced Yield Plus ETF Portfolio	D	0.20%	1.23%	0.11	-0.11%	0.48	0.7649	0.7400	0.7039	0.3843	-3.2%	-2.8%	2.1%	2.3%	1.70
25		D	0.23%	1.66%	0.10	-0.02%	0.73	0.7793	0.8213	0.7661	0.3463	-8.7%	-9.3%	0.6%	2.6%	2.36
26	Empire Life Emblem Balanced Portfolio	D	0.20%	1.38%	0.10	-0.05%	0.74	0.7221	0.8353	0.7901	0.4961	-6.6%	-7.3%	0.3%	2.3%	2.26
27	Counsel Managed High Yield Portfolio	D	0.20%	1.40%	0.10	-0.17%	0.57	0.5169	0.6868	0.7268	0.6550	-4.8%	-5.5%	0.9%	2.3%	2.55
28	Invesco Intactive Balanced Income Portfolio Ser A	D	0.18%	1.36%	0.09	-0.18%	0.56	0.7055	0.6965	0.7544	0.6441	-4.7%	-5.5%	1.7%	2.1%	2.16
29	CIBC Managed Monthly Income Balanced Portfolio	D	0.16%	1.22%	0.07	-0.09%	0.74	0.8506	0.7058	0.7204	0.4586	-5.2%	-5.4%	1.4%	1.8%	2.22
30	Counsel Managed Portfolio	D	0.14%	1.54%	0.05	-0.25%	0.61	0.8205	0.7345	0.7465	0.3596	-7.7%	-6.8%	1.6%	1.5%	2.60
	TD Target Return Balanced Fund	D	-0.03%	1.68%	-0.06	-0.23%	0.31	0.7818	0.3526	0.3755	0.0721	-5.5%	-6.1%	1.5%	-0.5%	2.24
32	TD Mgd Index Balanced Growth Portfolio	F	0.41%	1.70%	0.20	-0.12%	0.83	0.6124	0.8933	0.8914	0.5847	-5.0%	-2.8%	2.9%	4.8%	1.60
	TD Mgd Index Income & Moderate Growth Portfolio	F	0.36%	1.46%	0.20	-0.10%	0.71	0.5589	0.8537	0.8628	0.6963	-3.4%	-2.0%	2.3%	4.2%	1.54
34	Sun Life Granite Balanced Portfolio A (CAD)		0.42%	1.79%	0.20	-0.14%	0.86	0.5979	0.8907	0.8903	0.5549	-6.0%	-3.5%	2.9%	4.9%	0.00
35	Scotia INNOVA Balanced Income Portfolio	, E	0.30%	1.73%	0.19	-0.14%	0.58	0.5581	0.8966	0.8382	0.6102	-3.4%	-2.0%	2.1%	3.5%	0.00
36	BMO Balanced ETF Portfolio Class	, E	0.38%	1.68%	0.19	-0.12%	0.38	0.6643	0.8650	0.8595	0.4958	-4.5%	-3.1%	3.2%	4.5%	1.72
37	BMO SelectTrust Balanced Portfolio	, E	0.38%	1.72%	0.19	-0.12%	0.78	0.5933	0.8889	0.8393	0.5429	-5.7%	-4.7%	2.2%	4.5%	2.19
38		, E	0.37%	1.65%	0.19	-0.14%	0.82	0.6400	0.8726	0.8349	0.5445	-5.4%	-2.6%	2.8%	4.4%	2.50
39	Scotia INNOVA Balanced Growth Portfolio	, E	0.34%	1.46%	0.19	-0.13%	0.70	0.5819	0.9082	0.8670	0.5570	-4.6%	-3.1%	2.1%	4.4%	2.09
		F	0.34%	1.40%	0.19	-0.12%	0.70	0.5285	0.8921	0.8786	0.6414	-4.6%	-2.0%	1.9%	3.8%	2.05
40	TD Mgd Inc & Mod Growth Portfolio	F			0.18	-0.12%			0.8921		0.6414			1.9%	3.8%	2.05
	TD Mgd Income & Moderate Growth Portfolio	-	0.32% 0.37%	1.40% 1.68%	0.18	-0.12%	0.68	0.5285 0.5240	0.8588	0.8786 0.8518	0.6682	-3.4% -4.9%	-2.0%			2.05
42	Fidelity Balanced Portfolio	F					0.80						-2.7%	2.1%	4.4%	
43	RBC Select Choices Balanced Portfolio	-	0.35%	1.56%	0.18	-0.10%	0.70	0.7129	0.8665	0.8355	0.4324	-5.5%	-4.6%	2.9%	4.1%	2.16
44	National Bank Balanced Strategic Portfolio	F _	0.37%	1.69%	0.18	-0.14%	0.79	0.6565	0.8832	0.8638	0.4984	-5.9%	-3.6%	2.7%	4.4%	2.24
45	SEI Balanced 60/40 Class S	F	0.34%	1.62%	0.17	-0.16%	0.76	0.6824	0.8611	0.8708	0.5297	-6.3%	-4.9%	2.2%	3.9%	1.79
46	Manulife Simplicity Global Balanced Portfolio	F	0.35%	1.70%	0.17	-0.18%	0.82	0.5667	0.8936	0.9055	0.5209	-6.5%	-5.7%	1.7%	4.1%	2.55
47	Manulife Simplicity Balanced Fund	•	0.33%	1.63%	0.16	-0.17%	0.78	0.6170	0.8948	0.8891	0.5047	-6.3%	-5.5%	2.1%	3.9%	2.54
48	BMO SelectClass Balanced Portfolio Series A	F	0.35%	1.74%	0.16	-0.18%	0.83	0.6038	0.8881	0.8749	0.5335	-5.7%	-4.9%	1.9%	4.1%	2.50
49	TD Mgd Balanced Growth Portfolio	F -	0.35%	1.73%	0.16	-0.20%	0.84	0.5889	0.9134	0.8920	0.5473	-5.6%	-3.6%	1.8%	4.1%	2.19
50	CIBC Managed Balanced Portfolio	F	0.31%	1.50%	0.16	-0.16%	0.72	0.5798	0.8754	0.8878	0.5989	-4.4%	-2.5%	2.2%	3.6%	2.25
	CI Portfolio Series Conservative Balanced Fnd Cl A	F -	0.30%	1.43%	0.16	-0.14%	0.68	0.5775	0.8860	0.8745	0.5635	-3.9%	-3.5%	1.7%	3.5%	2.46
52	DynamicEdge Balanced Portfolio	F	0.32%	1.58%	0.16	-0.15%	0.72	0.5199	0.8631	0.8421	0.4854	-5.1%	-2.7%	2.2%	3.8%	2.23
53	DynamicEdge Balanced Class Portfolio	F	0.32%	1.56%	0.16	-0.15%	0.71	0.5265	0.8606	0.8396	0.4860	-4.9%	-2.6%	2.2%	3.7%	2.24
54	DynamicEdge Balanced Growth Class Portfolio	F	0.38%	1.93%	0.16	-0.19%	0.88	0.5318	0.8717	0.8399	0.4300	-7.2%	-3.9%	2.5%	4.4%	2.35
55	Marquis Balanced Growth Portfolio	F	0.36%	1.83%	0.16	-0.18%	0.83	0.6275	0.8756	0.8450	0.4133	-6.7%	-1.4%	3.1%	4.2%	2.41
56	TD Comfort Balanced Growth Portfolio	F	0.31%	1.53%	0.16	-0.14%	0.70	0.7255	0.8508	0.8207	0.5084	-5.1%	-4.5%	2.4%	3.6%	2.02
57	Marquis Balanced Portfolio	F	0.30%	1.48%	0.16	-0.14%	0.68	0.6199	0.8623	0.8528	0.4697	-4.7%	-1.1%	2.6%	3.5%	2.37

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								Corre	lations			Ret	urns		
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
58 CI Portfolio Series Conservative Fund Class A	F	0.27%	1.32%	0.16	-0.13%	0.63	0.4694	0.8447	0.8623	0.6853	-2.3%	-2.5%	1.4%	3.2%	2.33
59 BMO FundSelect Balanced Portfolio Series A	F	0.33%	1.66%	0.16	-0.18%	0.79	0.6039	0.9127	0.8777	0.4971	-5.8%	-4.4%	2.1%	3.8%	2.59
60 DynamicEdge Balanced Growth Portfolio	F	0.37%	1.92%	0.16	-0.20%	0.88	0.5334	0.8763	0.8430	0.4341	-7.0%	-4.1%	2.3%	4.3%	2.35
61 Scotia Global Balanced	F	0.39%	2.04%	0.16	-0.19%	0.89	0.2330	0.8107	0.7838	0.5740	-5.1%	-4.5%	0.4%	4.5%	2.00
62 Desjardins Melodia Balanced Growth Portfolio	F	0.33%	1.66%	0.16	-0.17%	0.77	0.6363	0.8267	0.8733	0.5678	-5.3%	-4.4%	2.8%	3.8%	2.31
63 Desjardins Melodia Diversified Growth Portfolio	F	0.29%	1.47%	0.16	-0.14%	0.68	0.6101	0.8033	0.8609	0.6326	-4.2%	-3.9%	2.4%	3.5%	2.22
64 Desjardins Chorus II Balanced Growth Fund	F	0.29%	1.46%	0.15	-0.16%	0.68	0.6283	0.8218	0.8707	0.6116	-4.4%	-4.1%	2.1%	3.3%	1.88
65 TD Comfort Balanced Portfolio	F	0.26%	1.33%	0.15	-0.12%	0.60	0.7261	0.8228	0.8021	0.5523	-4.3%	-4.0%	2.1%	3.1%	1.91
66 TD Advantage Balanced Portfolio	F	0.27%	1.36%	0.15	-0.15%	0.64	0.6057	0.8738	0.8318	0.6225	-4.0%	-3.6%	1.4%	3.1%	2.08
67 Desjardins Melodia Moderate Growth Portfolio	F	0.26%	1.30%	0.15	-0.13%	0.60	0.5536	0.7786	0.8399	0.7168	-3.2%	-3.3%	1.9%	3.0%	2.15
68 TD Advantage Balanced Growth Portfolio	F	0.30%	1.60%	0.15	-0.18%	0.75	0.6733	0.8960	0.8435	0.4842	-5.6%	-4.8%	1.7%	3.5%	2.19
69 Symmetry Balanced Portfolio	F	0.27%	1.40%	0.15	-0.15%	0.65	0.6243	0.8852	0.8480	0.4995	-4.8%	-4.1%	1.8%	3.1%	2.27
70 Desjardins Chorus II Growth Fund	F	0.31%	1.70%	0.14	-0.20%	0.79	0.6541	0.8314	0.8737	0.5483	-6.2%	-6.1%	2.3%	3.6%	2.01
71 AGF Elements Conservative Portfolio	F	0.28%	1.53%	0.14	-0.20%	0.74	0.4360	0.8748	0.8967	0.6285	-4.1%	-4.3%	0.8%	3.2%	2.37
72 AGF Elements Balanced Portfolio	F	0.31%	1.84%	0.14	-0.26%	0.89	0.5590	0.9068	0.9143	0.4947	-6.4%	-5.8%	1.4%	3.6%	2.39
73 Counsel Balanced Portfolio	F	0.27%	1.62%	0.13	-0.22%	0.77	0.5354	0.8546	0.9031	0.5889	-6.4%	-5.0%	1.2%	3.2%	2.44
74 Symmetry Moderate Growth Portfolio	F	0.28%	1.65%	0.13	-0.21%	0.76	0.6286	0.8974	0.8554	0.4187	-5.7%	-5.5%	1.8%	3.2%	2.26
75 Quadrus Balanced Folio	F	0.25%	1.54%	0.12	-0.19%	0.69	0.7566	0.8306	0.8522	0.4490	-5.2%	-3.9%	2.5%	2.9%	2.43
76 Franklin Quotential Balanced Income Portfolio A	F	0.24%	1.44%	0.12	-0.21%	0.69	0.5504	0.8537	0.9078	0.5924	-3.8%	-3.9%	0.9%	2.8%	2.11
77 Axiom Diversified Monthly Income Portfolio	F	0.23%	1.43%	0.12	-0.07%	0.89	0.9210	0.6389	0.6185	0.3340	-6.2%	-6.0%	2.8%	2.7%	2.13
78 Franklin Quotential Balanced Growth Portfolio A	F	0.26%	1.75%	0.11	-0.26%	0.71	0.6120	0.8821	0.9126	0.4659	-6.0%	-5.5%	0.9%	3.0%	2.29
79 Invesco Intactive Balanced Growth Portfolio Ser A	F	0.17%	1.61%	0.07	-0.24%	0.64	0.8069	0.7020	0.7535	0.4645	-6.5%	-7.4%	2.0%	1.9%	2.29
Category Average		0.31%	1.52%	0.16	-0.11%	0.74	0.6363	0.8346	0.8246	0.5219	-5.1%	-4.0%	2.2%	3.6%	2.03
Growth Portfolios	Typical Asse	t Mix: 10% -	30% Fixed Inc	come / 70%	% - 90% E	quity									
Meritage Equity Income Portfolio	С	0.34%	1.70%	0.16	0.07%	0.79	0.8380	0.7796	0.7169	0.2521	-6.8%	-5.3%	3.9%	3.9%	2.43
2 Dynamic Diversified Real Asset Fund	С	0.46%	3.05%	0.13	0.14%	0.94	0.5114	0.0462	0.2201	0.4544	-3.5%	-6.8%	5.2%	5.1%	2.42
3 Sun Life Granite Growth Portfolio Series A	D	0.48%	2.06%	0.20	-0.11%	1.34	0.6033	0.8995	0.8958	0.5229	-6.9%	-3.8%	3.2%	5.7%	2.36
4 BMO Matchmaker Strategic Growth Portfolio	D	0.44%	1.87%	0.20	-0.08%	0.71	0.6984	0.8488	0.8250	0.4314	-6.8%	-5.2%	3.3%	5.2%	0.00
5 Scotia Partners Growth Portfolio	D	0.41%	1.77%	0.19	-0.11%	0.70	0.6612	0.8889	0.8442	0.4395	-5.9%	-3.7%	3.8%	4.8%	2.35
6 DynamicEdge Growth Portfolio	D	0.44%	2.30%	0.16	-0.14%	1.32	0.5254	0.8768	0.8345	0.4046	-8.8%	-4.6%	2.9%	5.1%	2.41
7 DynamicEdge Growth Class Portfolio	D	0.44%	2.30%	0.16	-0.15%	1.33	0.5260	0.8758	0.8360	0.4050	-8.9%	-4.9%	2.8%	5.0%	2.44
8 Axiom Long-Term Growth Portfolio	D	0.27%	1.83%	0.11	-0.04%	0.89	0.8687	0.7283	0.7594	0.3233	-8.7%	-7.9%	3.0%	3.1%	2.25
9 Empire Life Emblem Growth Portfolio	D	0.25%	1.96%	0.09	-0.06%	0.88	0.8199	0.7785	0.7176	0.2267	-10.8%	-11.5%	0.9%	2.8%	2.41
10 Renaissance Optimal Inflation Opportunities Portfolio	D	0.17%	1.74%	0.06	-0.21%	0.60	0.2940	0.4780	0.6721	0.6954	-2.7%	-2.5%	1.4%	1.9%	2.19
11 Invesco Intactive Growth Portfolio Series A	D	0.16%	1.90%	0.05	-0.29%	0.61	0.8537	0.6897	0.7307	0.2918	-8.2%	-9.2%	2.2%	1.7%	2.36
12 Axiom Foreign Growth Portfolio	F	0.61%	2.70%	0.20	-0.22%	1.12	0.4000	0.9117	0.9284	0.5055	-6.8%	-2.6%	3.8%	7.1%	2.30

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								Corre	ations			Reti	ırns		
		Average Monthly	Monthly Standard	Sharpe					MSCI	Cdn. Universe					
Name	Rating	Return	Deviation	Ratio	Alpha	Beta	TSX	S&P 500	EAFE	Bond	3 Month	1 Year	3 Year	5 Year	MER
13 Sun Life Granite Balanced Growth Port A (CAD)	F	0.42%	1.80%	0.20	-0.12%	0.74	0.5739	0.8854	0.8979	0.5717	-5.1%	-3.2%	2.5%	5.0%	0.00
14 TD Mgd Index Aggressive Growth Portfolio	F	0.47%	2.06%	0.20	-0.15%	0.84	0.6738	0.9039	0.8986	0.4529	-7.1%	-4.0%	3.7%	5.6%	1.63
15 Fidelity Global Growth Portfolio	F	0.54%	2.39%	0.20	-0.19%	0.99	0.4869	0.9134	0.8826	0.5470	-7.6%	-2.6%	3.5%	6.3%	2.50
16 Fidelity Global Balanced Portfolio	F	0.45%	2.01%	0.19	-0.14%	0.81	0.3813	0.8638	0.8652	0.6805	-4.7%	-1.8%	2.4%	5.3%	2.45
17 Sun Life Granite Moderate Portfolio Series A	F	0.35%	1.50%	0.19	-0.12%	0.72	0.5541	0.8633	0.8850	0.6332	-4.1%	-2.9%	2.2%	4.1%	0.00
18 BMO SelectClass Growth Portfolio Series A	F	0.48%	2.19%	0.19	-0.17%	0.89	0.5968	0.9044	0.8808	0.4742	-7.9%	-6.3%	2.3%	5.6%	2.61
19 Fidelity Growth Portfolio	F	0.44%	2.03%	0.18	-0.16%	0.82	0.6328	0.8915	0.8558	0.5132	-7.9%	-4.0%	3.0%	5.2%	2.47
20 Axiom Global Growth Portfolio	F	0.46%	2.18%	0.18	-0.20%	0.90	0.5656	0.8958	0.9220	0.4898	-7.2%	-4.6%	3.4%	5.3%	2.30
21 CIBC Managed Balanced Growth Portfolio	F	0.39%	1.88%	0.18	-0.17%	0.77	0.5622	0.8837	0.8907	0.5791	-5.6%	-3.5%	3.0%	4.6%	2.46
22 BMO FundSelect Growth Portfolio Series A	F	0.42%	2.09%	0.17	-0.20%	0.85	0.6367	0.9183	0.8699	0.4031	-7.9%	-6.3%	2.8%	4.9%	2.69
23 SEI Growth 80/20 Class S	F	0.39%	1.97%	0.16	-0.19%	0.78	0.7116	0.8759	0.8711	0.4017	-8.4%	-6.4%	2.5%	4.5%	1.86
24 TD Mgd Aggressive Growth Portfolio	F	0.39%	2.01%	0.16	-0.22%	0.83	0.6213	0.9223	0.8978	0.4610	-7.3%	-4.6%	2.2%	4.6%	2.28
25 Manulife Simplicity Growth Portfolio	F	0.38%	1.99%	0.16	-0.21%	0.81	0.6417	0.9030	0.8884	0.4163	-8.5%	-7.1%	2.2%	4.4%	2.63
26 Desjardins Melodia Aggressive Growth Portfolio	F	0.37%	1.95%	0.16	-0.19%	0.77	0.6671	0.8427	0.8785	0.4887	-6.9%	-5.3%	3.3%	4.3%	2.47
27 CI Portfolio Series Balanced Fund Class A	F	0.31%	1.59%	0.16	-0.16%	0.65	0.6103	0.9055	0.8742	0.4840	-5.1%	-4.6%	1.8%	3.7%	2.43
28 Desjardins Melodia Maximum Growth Portfolio	F	0.40%	2.16%	0.16	-0.22%	0.85	0.6761	0.8509	0.8796	0.4510	-7.9%	-5.8%	3.6%	4.6%	2.52
29 Marquis Growth Portfolio	F	0.40%	2.15%	0.16	-0.21%	0.84	0.6313	0.8784	0.8397	0.3785	-8.4%	-2.7%	3.2%	4.6%	2.40
30 CI Portfolio Series Balanced Growth Fund Class A	F	0.33%	1.79%	0.15	-0.20%	0.71	0.6638	0.8967	0.8684	0.4017	-6.7%	-6.2%	2.1%	3.8%	2.44
31 TD Advantage Growth Portfolio	F	0.34%	1.87%	0.14	-0.21%	0.74	0.7143	0.8945	0.8341	0.3751	-7.3%	-6.0%	2.1%	3.9%	2.26
32 AGF Elements Growth Portfolio	F	0.40%	2.39%	0.14	-0.33%	1.00	0.5096	0.9357	0.9135	0.4150	-8.9%	-6.6%	1.4%	4.6%	2.40
33 CI Portfolio Series Growth Fund Class A	F	0.34%	1.94%	0.14	-0.21%	0.75	0.6983	0.8817	0.8490	0.3167	-7.6%	-6.6%	2.2%	3.9%	2.44
34 Desjardins Chorus II High Growth Fund	F	0.33%	2.00%	0.13	-0.24%	0.79	0.6746	0.8451	0.8810	0.4715	-7.6%	-7.1%	2.5%	3.8%	2.22
35 Counsel Growth Portfolio	F	0.31%	1.95%	0.12	-0.23%	1.23	0.5835	0.8700	0.9024	0.4990	-9.1%	-7.0%	1.2%	3.5%	2.68
36 Symmetry Growth Portfolio	F	0.30%	2.01%	0.12	-0.28%	0.79	0.6559	0.8948	0.8525	0.3409	-7.9%	-7.6%	1.6%	3.4%	2.45
37 Franklin Quotential Growth Portfolio A	F	0.29%	2.12%	0.11	-0.34%	0.86	0.6232	0.8963	0.9070	0.3844	-8.1%	-6.8%	0.7%	3.2%	2.38
38 Quadrus Advanced Folio	F	0.26%	1.94%	0.10	-0.27%	0.72	0.8015	0.8165	0.8305	0.3336	-8.0%	-6.5%	2.7%	3.0%	2.48
39 Axiom Canadian Growth Portfolio	F	0.14%	1.90%	0.04	-0.20%	0.99	0.9674	0.4981	0.5052	0.1204	-10.1%	-9.8%	2.5%	1.5%	2.25
Category Average		0.37%	2.03%	0.15	-0.17%	0.86	0.6337	0.8291	0.8283	0.4368	-7.3%	-5.5%	2.6%	4.3%	2.20
Aggressive Growth Portfolios	Typical Asso	+ Miv: 004 - 2	0% Fixed Inco	ama / 80%	- 100% E	auity.									
ABBIOCOIVO GIOWAITI OTAIONOS	1 ypicai 71000	C 1011X. 0 70 Z	0 70 T IXCO IIICC	51110 / 00 /0	10070 E	quity									
BMO Equity Growth ETF Portfolio Fund	D	0.53%	2.51%	0.18	-0.16%	0.79	0.6858	0.8756	0.8585	0.2890	-8.5%	-5.1%	4.8%	6.1%	1.77
2 Empire Life Emblem Aggressive Growth Portfolio	D	0.29%	2.25%	0.10	0.01%	0.77	0.8264	0.7729	0.7075	0.1605	-12.0%	-12.2%	1.5%	3.2%	2.56
3 Quadrus Aggressive Folio	D	0.29%	2.35%	0.10	0.01%	0.80	0.8170	0.8060	0.8110	0.2471	-10.3%	-8.1%	3.1%	3.2%	2.48
4 Invesco Intactive Maximum Growth Portfolio Ser A	D	0.18%	2.27%	0.05	-0.33%	0.58	0.8592	0.6851	0.7001	0.1364	-10.0%	-10.5%	2.6%	1.9%	2.44
5 TD U.S. Equity Portfolio	F	0.98%	3.50%	0.26	-0.26%	1.08	0.3635	0.9789	0.7832	0.4003	-10.0%	2.2%	6.2%	11.6%	2.16
6 TD Mgd Index Max Eqty Growth Portfolio	F	0.55%	2.45%	0.20	-0.16%	0.80	0.6951	0.9038	0.8934	0.3633	-9.2%	-5.1%	4.4%	6.4%	1.69
7 BMO SelectClass Equity Growth Portfolio Series A	F	0.55%	2.55%	0.19	-0.18%	0.82	0.5882	0.9086	0.8872	0.4306	-9.7%	-7.8%	2.6%	6.4%	2.71
8 Scotia Partners Maximum Growth Portfolio	F	0.43%	2.05%	0.18	-0.16%	0.81	0.6730	0.8937	0.8386	0.3867	-7.6%	-4.9%	3.9%	5.0%	2.46

December 2018

								Correlations					Retu	urns		
Nan	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
9	Axiom All Equity Portfolio	F	0.53%	2.62%	0.18	-0.22%	0.85	0.5944	0.8943	0.9100	0.4015	-9.2%	-6.1%	4.2%	6.1%	2.43
10	BMO FundSelect Equity Growth Portfolio Series A	F	0.52%	2.54%	0.18	-0.20%	0.82	0.6319	0.9177	0.8677	0.3536	-9.6%	-7.3%	3.3%	6.0%	2.85
11	CIBC Managed Aggressive Growth Portfolio	F	0.49%	2.40%	0.18	-0.20%	0.78	0.5631	0.9084	0.9009	0.4935	-7.9%	-4.6%	3.5%	5.6%	2.48
12	DynamicEdge Equity Class Portfolio	F	0.54%	2.75%	0.17	-0.21%	0.86	0.5211	0.8783	0.8301	0.3768	-10.9%	-5.3%	3.6%	6.2%	2.42
13	DynamicEdge Equity Portfolio	F	0.53%	2.75%	0.17	-0.22%	0.86	0.5188	0.8798	0.8305	0.3826	-10.9%	-5.7%	3.4%	6.1%	2.43
14	SEI Growth 100 Class S	F	0.44%	2.35%	0.16	-0.21%	0.74	0.7222	0.8744	0.8630	0.3191	-10.3%	-7.8%	2.8%	5.0%	1.89
15	TD Mgd Max Equity Growth Portfolio	F	0.43%	2.33%	0.16	-0.24%	0.76	0.6378	0.9223	0.8960	0.3972	-8.9%	-5.6%	2.3%	4.9%	2.43
16	Marquis Equity Portfolio	F	0.46%	2.57%	0.15	-0.24%	0.80	0.6295	0.8802	0.8337	0.3414	-10.2%	-3.3%	3.6%	5.2%	2.49
17	AGF Elements Global Portfolio	F	0.47%	2.81%	0.14	-0.35%	0.93	0.4864	0.9420	0.9041	0.3733	-10.5%	-7.3%	1.4%	5.3%	2.55
18	TD Advantage Aggressive Growth Portfolio	F	0.38%	2.17%	0.14	-0.22%	0.67	0.7360	0.8838	0.8200	0.2890	-8.9%	-7.1%	2.6%	4.3%	2.26
19	CI Portfolio Series Maximum Growth Fund Class A	F	0.38%	2.25%	0.14	-0.23%	0.70	0.7052	0.8761	0.8315	0.2529	-9.3%	-7.9%	2.5%	4.4%	2.43
20	Desjardins Chorus II Maximum Growth Fund	F	0.36%	2.21%	0.13	-0.28%	0.87	0.6794	0.8508	0.8810	0.4364	-8.8%	-7.9%	2.7%	4.1%	2.27
21	Counsel All Equity Portfolio	F	0.35%	2.30%	0.13	-0.29%	0.73	0.6069	0.8723	0.8950	0.4338	-11.7%	-8.9%	1.3%	4.0%	2.72
22	Symmetry Equity Portfolio	F	0.34%	2.53%	0.11	-0.35%	0.79	0.6359	0.8892	0.8347	0.2659	-9.4%	-9.4%	1.6%	3.7%	2.48
23	Franklin Quotential Global Growth Portfolio A	F	0.35%	2.65%	0.11	-0.41%	0.87	0.5714	0.9055	0.9139	0.3532	-9.4%	-7.3%	0.8%	3.9%	2.55
	Category Average		0.45%	2.48%	0.15	-0.22%	0.80	0.6412	0.8782	0.8475	0.3428	-9.7%	-6.7%	3.0%	5.2%	2.39

Methodology & Ratings Definitions

December 2018

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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