

# Monthly WRAP Fund Report

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# Paterson & Associates - Monthly WRAP Fund Report

December 2016

Name	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	Correlations				Returns					
							TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER	
<b>Conservative Portfolios</b>		Typical Asset Mix: 70% - 90% Fixed Income / 10% - 30% Equity														
1	RBC Strategic Monthly Income Bond	B	0.55%	1.17%	0.41	0.16%	1.13	0.3641	0.5715	0.7243	0.7769	-1.0%	6.4%	6.3%		1.82
2	Scotia Select Balanced Income	B	0.45%	1.01%	0.38	0.14%	0.84	0.5308	0.7228	0.7632	0.6578	-0.8%	3.1%	5.1%	5.5%	1.85
3	Meritage Moderate Portfolio	B	0.46%	1.06%	0.37	0.14%	0.86	0.6295	0.7367	0.8334	0.5517	-0.7%	5.0%	4.7%	5.6%	2.20
4	Marquis Balanced Income Portfolio	B	0.49%	1.15%	0.37	0.17%	0.86	0.6477	0.6917	0.7246	0.4696	0.6%	6.8%	5.1%	6.0%	2.38
5	Fidelity Income Portfolio	B	0.50%	1.24%	0.35	0.13%	0.99	0.3853	0.7070	0.7748	0.7236	-1.4%	2.1%	5.7%	6.1%	2.35
6	Meritas Income & Growth Portfolio	B	0.39%	0.93%	0.35	0.10%	0.77	0.5466	0.7637	0.7823	0.6499	-0.8%	3.0%	4.6%	4.7%	2.05
7	CIBC Managed Income Plus Portfolio	B	0.42%	1.03%	0.34	0.12%	0.80	0.5182	0.7954	0.8485	0.6021	-0.2%	3.2%	4.1%	5.1%	2.19
8	CIBC Managed Income Plus Portfolio	B	0.42%	1.03%	0.34	0.12%	0.80	0.5183	0.7953	0.8485	0.6020	-0.2%	3.2%	4.1%	5.1%	2.19
9	TD Mgd Income Portfolio	B	0.42%	1.04%	0.34	0.11%	0.84	0.4972	0.7820	0.8259	0.6548	-0.9%	1.6%	4.3%	5.1%	1.93
10	Empire Life Emblem Conservative Portfolio	B	0.40%	1.00%	0.33	0.10%	0.81	0.5519	0.7725	0.7684	0.6110	-0.8%	2.6%	4.2%		2.05
11	Manulife Simplicity Moderate Portfolio	B	0.49%	1.29%	0.33	0.10%	1.03	0.6422	0.7624	0.8563	0.5330	-0.6%	4.1%	5.2%	5.9%	2.19
12	SEI Conservative Monthly Income Class S	C	0.40%	0.95%	0.35	0.08%	0.85	0.5839	0.6622	0.7374	0.7061	-0.6%	4.6%	4.4%	4.8%	1.72
13	RBC Select Very Conservative Portfolio	C	0.37%	0.89%	0.34	0.08%	0.78	0.5162	0.6989	0.7471	0.7225	-1.3%	3.6%	4.3%	4.5%	1.68
14	RBC Managed Payout Solution	C	0.38%	0.91%	0.34	0.09%	0.78	0.7824	0.5661	0.6685	0.4952	0.2%	7.0%	4.3%	4.6%	1.63
15	TD Advantage Balanced Income Portfolio	C	0.43%	1.07%	0.33	0.08%	0.91	0.5110	0.7035	0.7712	0.7046	-1.4%	2.2%	4.4%	5.2%	1.97
16	SEI Income 30/70 Class P	C	0.40%	1.00%	0.33	0.07%	0.89	0.5813	0.6873	0.7580	0.6951	-0.1%	4.8%	4.6%	4.9%	2.19
17	Scotia INNOVA Income Portfolio	C	0.36%	0.87%	0.33	0.07%	0.76	0.4350	0.6021	0.6728	0.7946	-1.0%	3.0%	3.9%	4.3%	1.84
18	Meritage Moderate Income Portfolio	C	0.38%	0.99%	0.31	0.06%	0.84	0.6476	0.6198	0.7337	0.5972	-0.6%	5.7%	4.4%	4.5%	2.18
19	Scotia Selected Income Portfolio	C	0.39%	1.04%	0.31	0.03%	0.95	0.4701	0.6335	0.7326	0.7828	-1.2%	2.5%	4.6%		1.90
20	Desjardins Chorus II Balanced Income Fund	C	0.44%	1.20%	0.31	0.06%	1.02	0.5833	0.6870	0.8230	0.6432	-0.7%	3.7%	4.6%	5.3%	1.82
21	CIBC Managed Income Portfolio	C	0.32%	0.81%	0.31	0.06%	0.68	0.4012	0.6917	0.7552	0.7703	-0.8%	2.3%	3.4%	3.9%	1.80
22	Meritage Conservative Portfolio	C	0.34%	0.91%	0.30	0.04%	0.78	0.4718	0.6252	0.7315	0.7491	-1.6%	3.4%	3.8%	4.1%	2.19
23	Manulife Portrait Conservative Portfolio	C	0.38%	1.11%	0.28	0.03%	0.91	0.5112	0.7356	0.7690	0.6672	-1.7%	2.4%	4.2%	4.5%	2.24
24	Quadrus Moderate Folio	C	0.36%	1.09%	0.27	0.02%	0.91	0.7155	0.7234	0.8286	0.5213	-0.3%	4.1%	3.6%	4.4%	2.43
25	Desjardins Chorus II Balanced Income Corp. Class	C	0.39%	1.20%	0.27	0.02%	0.98	0.6576	0.7017	0.8195	0.5404	0.2%	4.7%	4.1%	4.7%	1.85
26	National Bank Conservative Strategy Portfolio	C	0.30%	0.87%	0.27	0.02%	0.76	0.6262	0.6612	0.7677	0.6315	-0.4%	3.6%	3.3%	3.6%	1.75
27	DynamicEdge Defensive Portfolio	C	0.28%	0.81%	0.26	0.03%	0.66	0.4828	0.6815	0.7331	0.6671	-1.0%	1.1%	2.9%		1.98
28	BMO Select Trust Income Portfolio	C	0.33%	1.06%	0.25	0.00%	0.87	0.3540	0.6455	0.6532	0.7878	-1.0%	2.0%	4.6%	4.0%	1.86
29	National Bank Income Managed Portfolio	C	0.30%	1.02%	0.22	0.02%	0.75	0.7954	0.5772	0.6779	0.3326	1.2%	6.1%	2.7%	3.5%	0.00
30	CI Portfolio Series Income Fund Class A	D	0.50%	1.09%	0.40	0.03%	0.86	0.3690	0.7340	0.8083	0.6806	-0.8%	3.5%	5.2%	6.1%	2.01
31	Fidelity Global Income Portfolio	D	0.57%	1.47%	0.34	-0.06%	1.15	0.2899	0.7175	0.7820	0.6912	-1.6%	0.9%	6.4%	7.0%	2.35
32	TD Comfort Balanced Income Portfolio	D	0.40%	0.98%	0.34	-0.04%	0.46	0.6733	0.6977	0.7744	0.5931	-0.4%	4.6%	4.1%	4.8%	1.75
33	Renaissance Optimal Income Portfolio	D	0.48%	1.22%	0.34	0.07%	1.08	0.6136	0.5705	0.7262	0.6695	-0.5%	6.2%	5.2%	5.8%	1.98
34	Manulife Leaders Balanced Income Portfolio	D	0.45%	1.20%	0.32	-0.05%	0.90	0.5265	0.7641	0.8126	0.5981	-0.4%	3.0%	4.6%	5.4%	2.43
35	Renaissance Optimal Conservative Income Portfolio	D	0.39%	1.03%	0.31	0.01%	1.01	0.4361	0.6093	0.7182	0.8711	-0.8%	4.6%	4.5%		1.63
36	SEI Income 20/80 Class S	D	0.34%	0.90%	0.30	0.03%	0.82	0.4663	0.5895	0.6713	0.8201	-1.4%	2.8%	4.0%	4.1%	1.43
37	SEI Income 20/80 Class S	D	0.34%	0.90%	0.30	0.03%	0.82	0.4664	0.5895	0.6713	0.8201	-1.4%	2.8%	4.0%	4.1%	1.43
38	DynamicEdge Conservative Class Portfolio	D	0.39%	1.08%	0.30	-0.05%	0.79	0.5181	0.7869	0.8094	0.5370	-1.0%	1.2%	3.8%		2.04
39	TD Comfort Conservative Income	D	0.29%	0.77%	0.29	0.03%	0.71	0.5397	0.5884	0.6836	0.7685	-1.1%	3.3%	3.4%	3.6%	1.53
40	Desjardins Chorus II Conservative Fund	D	0.36%	1.03%	0.29	0.02%	0.91	0.5320	0.6373	0.7743	0.7248	-1.0%	3.1%	4.0%	4.4%	1.74

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41 Manulife Simplicity Conservative Portfolio	D	0.35%	1.03%	0.27	0.00%	0.93	0.4760	0.6297	0.7233	0.7865	-1.8%	3.0%	4.2%	4.2%	1.94
42 SEI Income 20/80 Class P	D	0.30%	0.90%	0.26	-0.01%	0.82	0.4661	0.5891	0.6715	0.8201	-1.5%	2.3%	3.5%	3.7%	1.85
43 Desjardins Chorus II Conservative Corp. Class	D	0.30%	1.03%	0.23	-0.02%	0.87	0.6246	0.6576	0.7775	0.6019	0.0%	4.1%	3.4%	3.6%	1.77
44 Quadrus Conservative Folio	D	0.28%	0.93%	0.22	-0.05%	0.86	0.5759	0.6174	0.7271	0.7378	-1.1%	3.4%	3.3%	3.3%	2.30
45 BMO Income ETF Portfolio Advisor Class	D	0.30%	1.10%	0.21	-0.06%	0.97	0.4752	0.5918	0.6869	0.7715	-1.0%	2.7%	4.6%	3.6%	1.67
46 National Bank Stable Income Managed Portfolio	D	0.13%	0.65%	0.10	-0.05%	0.49	0.5916	0.3622	0.5012	0.5221	-0.1%	3.6%	1.5%	1.6%	0.00
47 BMO Matchmaker Strategic Security Portfolio	F	0.42%	1.05%	0.34	-0.04%	0.85	0.3298	0.7059	0.6969	0.7882	-1.2%	2.2%	5.0%	5.1%	2.25
48 TD Mgd Index Income Portfolio	F	0.44%	1.15%	0.33	-0.07%	0.94	0.4586	0.6951	0.7712	0.7670	-1.6%	2.5%	5.2%	5.4%	1.48
49 Sun Life Granite Conservative Portfolio Series A	F	0.41%	1.12%	0.31	-0.08%	0.89	0.4523	0.7577	0.8180	0.6696	-1.5%	2.2%	4.5%		0.00
50 Counsel Conservative Portfolio	F	0.43%	1.25%	0.29	-0.08%	0.95	0.5456	0.7628	0.8584	0.5794	-1.1%	1.1%	3.6%	5.2%	2.79
51 AGF Elements Yield Portfolio	F	0.40%	1.19%	0.28	-0.09%	0.90	0.4092	0.6380	0.7292	0.6941	-0.7%	3.2%	5.0%	4.8%	2.00
52 BMO SelectClass Security Portfolio	F	0.35%	1.07%	0.27	-0.11%	0.85	0.4249	0.6947	0.7341	0.7479	-1.4%	1.2%	3.9%	4.2%	2.33
53 BMO FundSelect Security Portfolio	F	0.32%	0.96%	0.26	-0.11%	0.77	0.4452	0.7238	0.7661	0.7279	-1.4%	1.8%	3.7%	3.8%	2.42
54 National Bank Conservative Diversified	F	0.24%	0.82%	0.21	-0.04%	0.75	0.4711	0.5990	0.6799	0.8011	-1.8%	1.4%	3.0%	2.9%	1.92
55 Meritage Conservative Income Portfolio	F	0.24%	0.83%	0.21	-0.04%	0.75	0.4925	0.4771	0.5890	0.7834	-1.5%	4.2%	3.3%	2.9%	2.10
56 Invesco Intactive Diversified Income Portfolio	F	0.30%	1.17%	0.19	-0.16%	0.83	0.6555	0.5282	0.6876	0.6816	-0.8%	5.0%	3.7%	3.5%	1.99
57 Franklin Quotential Diversified Income Portfolio T	F	0.29%	1.24%	0.18	-0.20%	0.90	0.4340	0.6163	0.7514	0.6497	-1.0%	1.8%	3.1%	3.5%	1.97
58 Counsel Managed Yield Portfolio	F	0.24%	1.10%	0.15	-0.13%	0.97	0.5835	0.3950	0.6169	0.6920	-0.7%	4.7%	2.6%	2.8%	2.64
59 SEI Income 100 Class S	F	0.18%	0.82%	0.14	-0.14%	0.93	0.0879	0.2460	0.3093	0.9820	-2.4%	1.5%	2.8%		1.40
60 SEI Income 100 Class P	F	0.15%	0.81%	0.10	-0.05%	0.74	0.0990	0.2485	0.3143	0.9812	-2.6%	1.0%	2.3%	1.7%	1.89
61 Empire Life Emblem Diversified Income Portfolio	TBD	0.28%	1.04%	0.21	-0.07%	0.95	0.3380	0.7459	0.7662	0.8763	-1.6%	1.6%			1.90
<b>Category Average</b>		<b>0.37%</b>	<b>1.03%</b>	<b>0.29</b>	<b>0.01%</b>	<b>0.86</b>	<b>0.5053</b>	<b>0.6487</b>	<b>0.7301</b>	<b>0.6898</b>	<b>-0.9%</b>	<b>3.2%</b>	<b>4.1%</b>	<b>4.4%</b>	<b>1.89</b>

## Balanced Portfolios

Typical Asset Mix: 40% - 60% Fixed Income / 40% - 60% Equity

1 Meritas Growth & Income Portfolio	A	0.63%	1.40%	0.40	0.28%	0.66	0.6595	0.8433	0.8604	0.3245	1.0%	4.6%	6.4%	7.7%	2.41
2 Meritage Growth Income Portfolio	A	0.59%	1.35%	0.38	0.21%	0.72	0.7743	0.7129	0.7932	0.2843	1.3%	8.5%	5.7%	7.1%	2.42
3 Empire Life Emblem Moderate Growth Portfolio	A	0.60%	1.43%	0.37	0.26%	0.58	0.7266	0.8124	0.8018	0.2773	1.7%	6.9%	6.2%		2.35
4 Empire Life Emblem Balanced Portfolio	A	0.49%	1.20%	0.35	0.19%	0.59	0.6598	0.8088	0.8081	0.4486	0.1%	4.2%	5.0%		2.25
5 Scotia INNOVA Balanced Income Portfolio	B	0.46%	1.04%	0.37	0.14%	0.85	0.5573	0.7365	0.8038	0.6263	-0.2%	3.5%	4.6%	5.6%	1.95
6 RBC Select Choices Conservative Portfolio	B	0.45%	1.07%	0.36	0.13%	0.86	0.6618	0.7702	0.8306	0.5276	-0.6%	4.0%	4.7%	5.5%	1.96
7 SEI Income 40/60 Class S	B	0.49%	1.18%	0.35	0.12%	0.97	0.6182	0.7660	0.8319	0.5867	-0.5%	3.4%	5.0%	5.9%	1.63
8 SEI Income 40/60 Class S	B	0.49%	1.18%	0.35	0.12%	0.97	0.6183	0.7659	0.8319	0.5867	-0.5%	3.4%	5.0%	5.9%	1.63
9 Meritage Growth Portfolio	B	0.64%	1.65%	0.35	0.20%	0.86	0.7642	0.7577	0.8514	0.2472	0.7%	7.2%	5.6%	7.8%	2.42
10 Meritage Balanced Income Portfolio	B	0.46%	1.12%	0.35	0.15%	0.60	0.7211	0.6822	0.7718	0.4509	0.4%	7.1%	5.0%	5.5%	2.38
11 National Bank Moderate Strategic Portfolio	B	0.48%	1.20%	0.34	0.12%	0.96	0.6495	0.7491	0.8220	0.5286	0.0%	4.4%	5.0%	5.8%	2.07
12 Meritage Balanced Portfolio	B	0.53%	1.35%	0.34	0.16%	0.71	0.7296	0.7442	0.8458	0.4006	-0.2%	6.2%	5.0%	6.5%	2.41
13 SEI Balanced Fund Class P	B	0.49%	1.36%	0.31	0.12%	0.70	0.6725	0.7760	0.8523	0.5111	-0.5%	3.5%	4.6%	5.9%	2.59
14 National Bank Income and Growth Managed Portfolio	B	0.45%	1.35%	0.29	0.12%	0.90	0.8089	0.6193	0.7077	0.2332	2.0%	8.0%	3.8%	5.5%	0.00
15 Mawer Balanced Fund Class A	C	0.91%	1.52%	0.55	0.18%	0.78	0.5294	0.8664	0.8515	0.4126	-1.2%	3.2%	8.5%	11.3%	0.94
16 Compass Balanced Portfolio	C	0.76%	1.32%	0.52	0.18%	0.62	0.7266	0.7836	0.8045	0.2744	1.6%	7.9%	6.8%	9.4%	1.90

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							TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER
17 Manulife Strategic Balanced Yield Portfolio	C	0.92%	1.98%	0.43	0.11%	0.86	0.5988	0.8357	0.7139	0.0788	3.3%	9.5%	9.4%		2.27
18 Renaissance Optimal Growth & Income Portfolio	C	0.63%	1.44%	0.39	-0.09%	0.77	0.6512	0.7708	0.8113	0.6153	1.4%	8.8%	7.1%		2.08
19 Axiom Balanced Income Portfolio	C	0.44%	1.16%	0.32	0.06%	1.00	0.6677	0.7062	0.8042	0.5951	-1.0%	4.4%	4.7%	5.3%	2.08
20 Axiom Diversified Monthly Income Portfolio	C	0.50%	1.35%	0.32	0.06%	0.83	0.9096	0.5454	0.6611	0.2592	0.9%	9.8%	4.9%	6.0%	2.21
21 SEI Income 40/60 Class P	C	0.43%	1.18%	0.30	0.06%	0.98	0.6182	0.7655	0.8319	0.5871	-0.7%	2.7%	4.2%	5.1%	2.40
22 CIBC Managed Monthly Income Balanced Portfolio	C	0.42%	1.16%	0.30	0.06%	0.69	0.8498	0.5986	0.7478	0.3613	0.5%	6.8%	3.8%	5.0%	2.21
23 National Bank Moderate Diversified	C	0.37%	1.09%	0.28	0.01%	0.95	0.6357	0.6766	0.7645	0.6366	-1.6%	3.1%	4.2%	4.4%	2.21
24 National Bank Monthly Moderate Income	C	0.38%	1.55%	0.20	0.05%	0.89	0.8376	0.4016	0.5836	0.0942	3.4%	13.7%	3.0%	4.5%	1.85
25 National Bank Monthly Conservative Income	C	0.27%	1.09%	0.18	0.01%	0.68	0.8117	0.3252	0.5106	0.1819	2.1%	10.3%	2.5%	3.2%	1.56
26 BMO Matchmaker Strategic Balanced Portfolio	D	0.61%	1.29%	0.42	0.00%	0.65	0.6395	0.8468	0.8117	0.4447	0.8%	5.1%	6.3%	7.4%	0.00
27 CC&L Diversified Income Portfolio	D	0.59%	1.25%	0.42	0.02%	0.61	0.6142	0.7961	0.7984	0.4450	0.5%	4.3%	6.2%	7.2%	0.00
28 Scotia Selected Balanced Growth	D	0.61%	1.35%	0.40	-0.02%	0.68	0.6465	0.8059	0.8472	0.4237	-0.2%	4.3%	6.1%	7.5%	2.02
29 National Bank Balanced Strategic Portfolio	D	0.68%	1.54%	0.40	-0.04%	0.77	0.6832	0.8078	0.8729	0.3674	0.4%	4.9%	6.3%	8.3%	2.24
30 CI Portfolio Series Conservative Balanced Fnd CI A	D	0.62%	1.41%	0.39	-0.06%	0.73	0.6225	0.8602	0.8811	0.3848	0.3%	3.8%	5.5%	7.6%	2.45
31 RBC Select Choices Balanced Portfolio	D	0.64%	1.46%	0.39	-0.03%	0.72	0.7197	0.8167	0.8478	0.3026	0.8%	5.8%	6.0%	7.8%	2.16
32 Scotia INNOVA Balanced Growth Portfolio	D	0.61%	1.39%	0.39	-0.06%	0.71	0.6138	0.8201	0.8736	0.4446	0.6%	3.9%	5.8%	7.4%	2.07
33 Fidelity Balanced Portfolio	D	0.65%	1.52%	0.38	-0.08%	0.78	0.5423	0.7907	0.8631	0.5496	-1.1%	3.2%	6.4%	8.0%	2.44
34 TD Comfort Balanced Growth Portfolio	D	0.60%	1.41%	0.38	-0.05%	0.69	0.7321	0.7767	0.8397	0.3981	1.0%	6.5%	5.8%	7.3%	2.02
35 TD Comfort Balanced Portfolio	D	0.52%	1.20%	0.38	-0.02%	0.58	0.7238	0.7414	0.8087	0.4664	0.4%	6.1%	5.1%	6.3%	1.91
36 TD Advantage Balanced Growth Portfolio	D	0.63%	1.50%	0.37	-0.08%	0.75	0.6943	0.8164	0.8690	0.3494	0.8%	4.3%	5.6%	7.7%	2.20
37 CI Portfolio Series Conservative Fund Class A	D	0.54%	1.27%	0.37	-0.09%	0.67	0.5479	0.8382	0.8764	0.5031	-0.5%	2.8%	4.9%	6.6%	2.31
38 TD Mgd Index Income & Moderate Growth Portfolio	D	0.57%	1.35%	0.37	-0.09%	0.70	0.5727	0.7906	0.8670	0.5986	-0.4%	3.6%	6.0%	6.9%	1.54
39 TD Advantage Balanced Portfolio	D	0.53%	1.25%	0.37	-0.07%	0.63	0.6346	0.7845	0.8461	0.5098	-0.3%	3.3%	5.0%	6.4%	2.07
40 Scotia INNOVA Balanced Income Portfolio	D	0.47%	1.14%	0.35	-0.07%	0.58	0.5230	0.7904	0.8169	0.6529	0.5%	3.7%	5.0%		1.94
41 Marquis Balanced Portfolio	D	0.53%	1.44%	0.32	-0.13%	0.70	0.6699	0.8070	0.8511	0.3040	-0.2%	1.9%	3.9%	6.4%	2.57
42 Desjardins Chorus II Balanced Growth Corp. Class	D	0.47%	1.34%	0.30	-0.14%	0.65	0.6959	0.7196	0.8461	0.4691	0.6%	5.4%	4.6%	5.7%	1.92
43 Counsel Managed High Yield Portfolio	D	0.43%	1.39%	0.26	-0.15%	0.61	0.5149	0.5552	0.7290	0.7563	-1.2%	4.9%	4.5%		2.76
44 Counsel Income Managed Portfolio	D	0.38%	1.32%	0.23	0.00%	0.73	0.7566	0.6536	0.7172	0.4499	-0.1%	6.3%	4.3%	4.5%	2.90
45 Invesco Intactive Balanced Growth Portfolio Ser A	D	0.38%	1.56%	0.20	-0.23%	0.65	0.8297	0.5825	0.7438	0.3822	0.2%	6.6%	3.4%	4.5%	2.29
46 Invesco Intactive Balanced Income Portfolio Ser A	D	0.31%	1.30%	0.18	-0.20%	0.55	0.7176	0.5471	0.7083	0.6025	-0.5%	5.4%	3.6%	3.7%	2.16
47 Counsel Managed Portfolio	D	0.34%	1.54%	0.18	-0.25%	0.63	0.8212	0.6516	0.7195	0.2734	1.1%	6.5%	3.1%	4.0%	2.96
48 BMO Balanced Yield Plus ETF Portfolio	D	0.30%	1.36%	0.17	-0.17%	0.50	0.7001	0.5055	0.6374	0.3664	0.8%	5.0%	3.5%		1.70
49 TD Mgd Index Balanced Growth Portfolio	F	0.67%	1.58%	0.38	-0.12%	0.83	0.6262	0.8326	0.9065	0.4699	0.7%	4.7%	6.7%	8.1%	1.60
50 BMO SelectTrust Balanced Portfolio	F	0.65%	1.55%	0.37	-0.10%	0.80	0.5428	0.8435	0.8496	0.4905	0.6%	3.3%	6.5%	7.9%	2.20
51 Manulife Simplicity Global Balanced Portfolio	F	0.70%	1.70%	0.37	-0.13%	0.89	0.6062	0.8458	0.9132	0.3693	0.0%	2.5%	6.0%	8.6%	2.58
52 Sun Life Granite Balanced Portfolio A (CAD)	F	0.66%	1.58%	0.37	-0.13%	0.84	0.5597	0.8490	0.8955	0.4576	-0.3%	4.1%	6.7%	8.0%	0.00
53 TD Mgd Inc & Mod Growth Portfolio	F	0.55%	1.32%	0.37	-0.10%	0.70	0.5654	0.8364	0.8803	0.5166	-0.3%	2.3%	5.2%	6.7%	2.13
54 TD Mgd Income & Moderate Growth Portfolio	F	0.55%	1.32%	0.37	-0.10%	0.70	0.5654	0.8364	0.8803	0.5166	-0.3%	2.3%	5.2%	6.7%	2.13
55 SEI Balanced 60/40-S	F	0.63%	1.53%	0.36	-0.10%	0.78	0.7006	0.8082	0.8724	0.4096	0.3%	4.5%	5.9%	7.6%	1.79
56 SEI Balanced 60/40 Class S	F	0.63%	1.54%	0.36	-0.10%	0.78	0.7007	0.8081	0.8724	0.4095	0.3%	4.5%	5.9%	7.6%	1.79
57 TD Mgd Balanced Growth Portfolio	F	0.67%	1.65%	0.36	-0.14%	0.86	0.6218	0.8548	0.9021	0.3963	0.1%	2.4%	5.8%	8.1%	2.27
58 CIBC Managed Balanced Portfolio	F	0.60%	1.46%	0.36	-0.11%	0.76	0.6215	0.8346	0.8931	0.4195	-0.3%	3.3%	4.9%	7.3%	2.25
59 National Bank Balanced Diversified	F	0.60%	1.47%	0.36	-0.09%	0.73	0.6622	0.7816	0.8507	0.4368	-0.8%	3.8%	5.8%	7.3%	2.49

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# Paterson & Associates - Monthly WRAP Fund Report

December 2016

Name	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	Correlations				Returns				
							TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER
60 SEI Balanced Monthly Income - P Class	F	0.59%	1.46%	0.36	-0.08%	0.72	0.7266	0.7672	0.8382	0.4473	0.5%	6.7%	5.7%	7.2%	2.57
61 Manulife Leaders Balanced Growth Portfolio	F	0.63%	1.57%	0.36	-0.11%	0.79	0.6500	0.8145	0.8540	0.3891	0.3%	3.7%	5.6%	7.6%	2.47
62 Scotia Global Balanced	F	0.76%	2.06%	0.33	-0.17%	0.99	0.2390	0.7989	0.7827	0.4505	0.2%	-2.3%	6.3%	9.2%	2.37
63 Manulife Simplicity Balanced Fund	F	0.60%	1.59%	0.33	-0.16%	0.81	0.6714	0.8203	0.8896	0.3766	0.2%	4.1%	5.8%	7.2%	2.54
64 Desjardins Chorus II Growth Fund	F	0.56%	1.51%	0.33	-0.15%	0.76	0.6614	0.7465	0.8780	0.4781	-0.2%	4.4%	5.1%	6.8%	2.01
65 SEI Balanced 60/40 Fund Class - P	F	0.57%	1.53%	0.32	-0.16%	0.78	0.7007	0.8079	0.8726	0.4098	0.1%	3.7%	5.1%	6.9%	2.55
66 Counsel Balanced Portfolio	F	0.59%	1.61%	0.32	-0.18%	0.82	0.6082	0.7995	0.8928	0.4308	-0.8%	1.0%	4.4%	7.1%	2.86
67 AGF Elements Balanced Portfolio	F	0.61%	1.68%	0.32	-0.21%	0.88	0.5881	0.8621	0.8842	0.4038	1.2%	3.6%	5.9%	7.4%	2.33
68 BMO SelectClass Balanced Portfolio	F	0.57%	1.56%	0.32	-0.17%	0.80	0.5838	0.8284	0.8518	0.4719	0.2%	2.7%	5.8%	6.9%	2.50
69 Desjardins Chorus II Balanced Growth Fund	F	0.51%	1.35%	0.32	-0.12%	0.67	0.6324	0.7185	0.8552	0.5552	-0.3%	4.4%	4.9%	6.1%	1.88
70 Marquis Balanced Growth Portfolio	F	0.63%	1.76%	0.32	-0.16%	0.85	0.6699	0.8139	0.8514	0.2405	-0.2%	1.7%	4.4%	7.6%	2.54
71 DynamicEdge Balanced Growth Portfolio	F	0.63%	1.77%	0.32	-0.20%	0.88	0.5607	0.8322	0.8426	0.3397	-1.1%	0.3%	4.9%	7.6%	2.35
72 BMO FundSelect Balanced Portfolio	F	0.54%	1.48%	0.32	-0.19%	0.77	0.5924	0.8657	0.8727	0.4134	0.4%	3.0%	5.3%	6.5%	2.59
73 DynamicEdge Balanced Growth Class Portfolio	F	0.62%	1.77%	0.31	-0.20%	0.88	0.5570	0.8328	0.8392	0.3412	-1.2%	0.2%	4.9%	7.5%	2.39
74 BMO Balanced ETF Portfolio Class	F	0.56%	1.58%	0.31	-0.15%	0.77	0.6533	0.7412	0.8328	0.4417	1.6%	6.3%	6.4%	6.8%	1.72
75 Manulife Portrait Moderate Portfolio	F	0.47%	1.27%	0.31	-0.12%	0.53	0.5703	0.7820	0.8358	0.5470	-1.3%	2.6%	4.4%	5.6%	2.39
76 DynamicEdge Balanced Portfolio	F	0.52%	1.45%	0.31	-0.16%	0.73	0.5529	0.8134	0.8355	0.4047	-1.2%	0.4%	4.2%	6.3%	2.23
77 DynamicEdge Balanced Class Portfolio	F	0.51%	1.45%	0.31	-0.16%	0.72	0.5604	0.8107	0.8340	0.4059	-1.2%	0.4%	4.2%	6.2%	2.26
78 AGF Elements Conservative Portfolio	F	0.48%	1.37%	0.30	-0.19%	0.72	0.4529	0.8288	0.8380	0.5729	-0.1%	2.1%	5.3%	5.8%	2.36
79 Desjardins Chorus II Growth Corporate Class	F	0.53%	1.54%	0.30	-0.16%	0.74	0.7285	0.7357	0.8555	0.3795	0.4%	5.4%	4.7%	6.4%	2.07
80 Franklin Quotential Balanced Growth Portfolio A	F	0.59%	1.77%	0.29	-0.24%	0.76	0.6619	0.7939	0.9114	0.3144	0.9%	2.2%	4.9%	7.1%	2.31
81 Franklin Quotential Balanced Income Portfolio A	F	0.48%	1.46%	0.28	-0.21%	0.75	0.6077	0.7741	0.8974	0.4576	-0.1%	1.9%	4.5%	5.8%	2.13
82 Quadrus Balanced Folio	F	0.48%	1.49%	0.28	-0.18%	0.70	0.8053	0.7537	0.8517	0.2926	1.2%	5.5%	4.3%	5.8%	2.50
<b>Category Average</b>		<b>0.55%</b>	<b>1.43%</b>	<b>0.34</b>	<b>-0.05%</b>	<b>0.75</b>	<b>0.6522</b>	<b>0.7609</b>	<b>0.8242</b>	<b>0.4272</b>	<b>0.2%</b>	<b>4.4%</b>	<b>5.2%</b>	<b>6.7%</b>	<b>2.10</b>

## Growth Portfolios

Typical Asset Mix: 10% - 30% Fixed Income / 70% - 90% Equity

1 Meritas Growth Portfolio	A	0.77%	1.65%	0.42	0.39%	0.73	0.6479	0.8727	0.8623	0.2207	2.0%	5.4%	7.3%	9.5%	2.49
2 Empire Life Emblem Growth Portfolio	A	0.69%	1.72%	0.36	0.27%	0.72	0.7803	0.7652	0.7673	0.1485	3.1%	9.7%	7.0%		2.40
3 Sun Life Granite Growth Portfolio Series A	B	0.78%	1.93%	0.37	0.06%	1.32	0.5874	0.8576	0.9082	0.3874	-0.1%	4.3%	7.8%		0.00
4 Meritage Equity Income Portfolio	B	0.62%	1.60%	0.35	0.21%	0.70	0.7993	0.6765	0.7786	0.1880	2.1%	9.9%	5.9%	7.6%	2.73
5 Counsel Growth Portfolio	C	0.73%	1.98%	0.33	0.04%	1.25	0.6420	0.8070	0.8972	0.3187	-0.5%	0.8%	5.0%	8.8%	2.98
6 DynamicEdge Growth Portfolio	C	0.73%	2.10%	0.31	0.02%	1.29	0.5495	0.8417	0.8365	0.2981	-1.4%	-0.1%	5.6%	8.8%	2.44
7 DynamicEdge Growth Class Portfolio	C	0.72%	2.10%	0.31	0.02%	1.29	0.5516	0.8405	0.8394	0.2968	-1.3%	0.0%	5.5%	8.7%	2.47
8 Axiom Long-Term Growth Portfolio	C	0.58%	1.83%	0.28	0.06%	0.88	0.8847	0.6335	0.7788	0.1866	0.7%	8.5%	5.0%	7.0%	2.65
9 Fidelity Growth Portfolio	D	0.84%	1.78%	0.43	-0.01%	0.77	0.6100	0.8338	0.8878	0.3952	-0.3%	4.7%	7.2%	10.4%	2.47
10 BMO Matchmaker Strategic Growth Portfolio	D	0.78%	1.74%	0.41	0.00%	0.71	0.6990	0.8196	0.8175	0.2964	1.2%	6.2%	7.5%	9.6%	0.00
11 CI Portfolio Series Balanced Fund Class A	D	0.68%	1.59%	0.38	-0.08%	0.69	0.6394	0.8699	0.8825	0.3108	0.9%	4.3%	5.8%	8.3%	2.42
12 TD Advantage Growth Portfolio	D	0.74%	1.81%	0.37	-0.09%	0.75	0.7325	0.8144	0.8661	0.2216	1.9%	5.4%	6.2%	9.0%	2.27
13 CC&L Balanced Growth Portfolio	D	0.58%	1.57%	0.32	-0.09%	0.72	0.8260	0.7255	0.8359	0.2526	0.9%	5.6%	4.9%	7.0%	0.00

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# Paterson & Associates - Monthly WRAP Fund Report

December 2016

Name	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	Correlations				Returns				
							TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER
14 Counsel World Managed Portfolio	D	0.53%	1.67%	0.28	-0.04%	1.04	0.6899	0.7938	0.8606	0.3356	-0.9%	1.2%	3.0%	6.4%	3.12
15 Invesco Intactive Growth Portfolio Series A	D	0.45%	1.89%	0.20	-0.25%	0.63	0.8710	0.5934	0.7422	0.1849	1.2%	7.8%	3.2%	5.4%	2.35
16 Dynamic Diversified Real Asset Fund	D	0.26%	3.50%	0.05	-0.44%	1.19	0.5802	-0.0043	0.2024	0.4368	-7.2%	19.2%	9.5%	2.4%	2.44
17 Fidelity Global Growth Portfolio	F	0.93%	2.15%	0.40	-0.12%	0.95	0.4855	0.8639	0.8943	0.4078	-1.1%	1.7%	7.5%	11.4%	2.48
18 TD Mgd Index Aggressive Growth Portfolio	F	0.82%	1.95%	0.39	-0.13%	0.86	0.6852	0.8446	0.9230	0.3140	2.3%	6.4%	7.7%	10.1%	1.63
19 Sun Life Granite Balanced Growth Port A (CAD)	F	0.72%	1.73%	0.38	-0.13%	0.77	0.5652	0.8546	0.8992	0.4306	-0.5%	3.5%	7.1%	8.8%	0.00
20 CI Portfolio Series Balanced Growth Fund Class A	F	0.74%	1.79%	0.38	-0.10%	0.76	0.6860	0.8558	0.8753	0.2396	1.6%	5.2%	6.0%	9.0%	2.44
21 CI Portfolio Series Growth Fund Class A	F	0.81%	1.99%	0.37	-0.10%	0.82	0.7115	0.8409	0.8553	0.1525	2.3%	5.6%	6.2%	9.9%	2.43
22 SEI Growth 80/20 Class S	F	0.78%	1.90%	0.37	-0.11%	0.81	0.7254	0.8311	0.8796	0.2492	1.6%	5.3%	6.8%	9.5%	1.87
23 BMO SelectClass Growth Portfolio	F	0.81%	1.99%	0.37	-0.15%	0.87	0.5777	0.8656	0.8719	0.3944	1.3%	3.1%	8.2%	9.9%	2.61
24 TD Mgd Aggressive Growth Portfolio	F	0.80%	1.99%	0.37	-0.16%	0.87	0.6587	0.8569	0.9059	0.2784	1.0%	3.2%	6.5%	9.8%	2.36
25 Fidelity Global Balanced Portfolio	F	0.72%	1.81%	0.36	-0.13%	0.77	0.4016	0.8006	0.8635	0.5630	-1.6%	1.1%	6.9%	8.8%	2.44
26 CIBC Managed Balanced Growth Portfolio	F	0.72%	1.83%	0.36	-0.17%	0.80	0.6030	0.8393	0.8984	0.3985	-0.4%	3.7%	6.0%	8.8%	2.46
27 Sun Life Granite Moderate Portfolio Series A	F	0.56%	1.40%	0.35	-0.13%	0.74	0.5319	0.8282	0.8817	0.5227	-0.9%	3.2%	5.8%	8.8%	0.00
28 Manulife Leaders Opportunities Portfolio	F	0.73%	1.89%	0.35	-0.16%	0.81	0.6710	0.8393	0.8652	0.2963	0.5%	3.4%	6.1%	8.9%	2.50
29 Manulife Portrait Dividend Growth & Income Portfolio	F	0.66%	1.71%	0.35	-0.14%	0.73	0.5464	0.8555	0.8396	0.3761	-0.7%	1.4%	5.8%	8.1%	2.56
30 BMO FundSelect Growth Portfolio	F	0.75%	1.96%	0.35	-0.18%	0.85	0.6564	0.8617	0.8870	0.2633	1.4%	4.1%	6.7%	9.2%	2.69
31 Manulife Portrait Dividend Growth & Income Class Po	F	0.66%	1.70%	0.35	-0.14%	0.73	0.5463	0.8550	0.8416	0.3777	-0.8%	1.2%	5.7%	8.0%	2.59
32 Manulife Portrait Aggressive Portfolio	F	0.75%	1.97%	0.35	-0.17%	0.83	0.6965	0.8179	0.8869	0.2667	-0.4%	4.2%	6.2%	9.1%	2.55
33 SEI Growth 80/20 Fund Class - P	F	0.71%	1.90%	0.34	-0.18%	0.81	0.7256	0.8309	0.8797	0.2495	1.4%	4.5%	5.9%	8.7%	2.65
34 Manulife Simplicity Growth Portfolio	F	0.71%	1.91%	0.33	-0.20%	0.83	0.6834	0.8358	0.8926	0.2856	0.7%	4.1%	6.6%	8.6%	2.69
35 Manulife Portrait Growth Portfolio	F	0.65%	1.77%	0.33	-0.18%	0.76	0.6627	0.8222	0.8847	0.3474	-0.6%	3.5%	6.0%	7.9%	2.40
36 Manulife Portrait Growth Portfolio Class	F	0.65%	1.77%	0.33	-0.19%	0.76	0.6652	0.8238	0.8861	0.3431	-0.4%	3.4%	5.9%	7.8%	2.57
37 SEI Growth 70/30 Class P	F	0.62%	1.68%	0.33	-0.16%	0.71	0.7402	0.8080	0.8701	0.3218	0.7%	4.7%	5.4%	7.5%	2.64
38 Marquis Growth Portfolio	F	0.74%	2.08%	0.32	-0.20%	0.85	0.6647	0.8222	0.8439	0.1838	0.0%	1.8%	5.1%	9.0%	2.54
39 Axiom Foreign Growth Portfolio	F	0.88%	2.51%	0.32	-0.36%	1.13	0.4386	0.8935	0.9169	0.3468	0.5%	-0.5%	7.8%	10.7%	2.80
40 Desjardins Chorus II High Growth Fund	F	0.65%	1.80%	0.32	-0.19%	0.76	0.6852	0.7716	0.8959	0.3746	0.2%	4.7%	5.4%	7.8%	2.22
41 Axiom Global Growth Portfolio	F	0.73%	2.07%	0.32	-0.28%	0.91	0.6130	0.8489	0.9180	0.3291	0.4%	2.8%	6.4%	8.8%	2.79
42 AGF Elements Growth Portfolio	F	0.75%	2.19%	0.31	-0.33%	0.97	0.5448	0.8881	0.8954	0.3150	2.3%	2.2%	7.1%	9.0%	2.35
43 Desjardins Chorus II High Growth Corp. Class	F	0.61%	1.80%	0.30	-0.19%	0.73	0.7444	0.7476	0.8677	0.2931	0.9%	6.0%	5.1%	7.4%	2.25
44 Franklin Quotential Growth Portfolio A	F	0.71%	2.16%	0.30	-0.30%	0.92	0.6648	0.8107	0.9128	0.2175	1.8%	2.1%	5.4%	8.5%	2.41
45 Quadrus Advanced Folio	F	0.60%	1.89%	0.28	-0.21%	0.74	0.8294	0.7480	0.8326	0.1662	2.2%	7.3%	4.6%	7.2%	2.57
46 Axiom Canadian Growth Portfolio	F	0.50%	1.89%	0.23	-0.07%	0.97	0.9632	0.4159	0.5723	0.0352	1.2%	12.3%	4.0%	5.9%	2.57
47 Renaissance Optimal Inflation Opportunities Portfolio	F	0.42%	1.98%	0.18	-0.32%	0.78	0.4348	0.4758	0.7093	0.6059	-3.5%	2.5%	2.6%	2.41	
<b>Category Average</b>		<b>0.69%</b>	<b>1.91%</b>	<b>0.33</b>	<b>-0.12%</b>	<b>0.86</b>	<b>0.6574</b>	<b>0.7829</b>	<b>0.8428</b>	<b>0.3069</b>	<b>0.3%</b>	<b>4.5%</b>	<b>6.1%</b>	<b>8.4%</b>	<b>2.23</b>

## Aggressive Growth Portfolios

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

1 Empire Life Emblem Aggressive Growth Portfolio	A	0.79%	2.08%	0.35	0.34%	0.66	0.7929	0.7489	0.7530	0.0531	4.4%	11.4%	7.7%	2.55	
2 Quadrus Aggressive Folio	B	0.72%	2.33%	0.28	0.18%	0.79	0.8359	0.7376	0.8130	0.0750	3.2%	8.7%	5.2%	8.7%	2.58
3 TD Advantage Aggressive Growth Portfolio	D	0.85%	2.15%	0.37	-0.11%	0.70	0.7497	0.8058	0.8528	0.1276	3.1%	6.6%	6.9%	10.5%	2.26

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# Paterson & Associates - Monthly WRAP Fund Report

December 2016

Name	Rating	Average Monthly Return	Monthly Standard Deviation	Sharpe Ratio	Alpha	Beta	Correlations				Returns				
							TSX	S&P 500	MSCI EAFE	Cdn. Universe Bond	3 Month	1 Year	3 Year	5 Year	MER
4 Invesco Intactive Maximum Growth Portfolio Ser A	D	0.63%	2.29%	0.25	-0.21%	0.61	0.8532	0.6195	0.7352	0.0146	2.5%	9.0%	3.4%	7.5%	2.43
5 TD U.S. Equity Portfolio	F	1.52%	3.17%	0.46	-0.29%	1.09	0.3087	0.9681	0.7406	0.2336	4.7%	2.7%	14.1%	19.1%	2.40
6 TD Mgd Index Max Eqty Growth Portfolio	F	0.99%	2.36%	0.39	-0.13%	0.81	0.7031	0.8483	0.9180	0.2155	3.9%	7.9%	8.8%	12.2%	1.68
7 BMO SelectClass Aggressive Growth Portfolio	F	0.97%	2.39%	0.38	-0.16%	0.82	0.5806	0.8770	0.8831	0.3142	1.6%	2.7%	9.0%	11.9%	2.71
8 SEI Growth 100 Class S	F	0.92%	2.31%	0.37	-0.14%	0.77	0.7295	0.8317	0.8734	0.1454	2.7%	5.8%	7.6%	11.3%	1.89
9 CI Portfolio Series Maximum Growth Fund Class A	F	0.93%	2.32%	0.37	-0.12%	0.76	0.7130	0.8387	0.8400	0.0927	3.4%	6.6%	7.0%	11.4%	2.42
10 SEI Global Growth 100 Fund Class - P	F	0.94%	2.35%	0.37	-0.17%	0.80	0.6651	0.8568	0.8979	0.1784	2.3%	4.7%	6.9%	11.5%	2.75
11 TD Mgd Max Equity Growth Portfolio	F	0.91%	2.33%	0.36	-0.19%	0.80	0.6665	0.8566	0.9037	0.2090	1.8%	3.4%	7.1%	11.1%	2.51
12 BMO FundSelect Aggressive Growth Portfolio	F	0.91%	2.39%	0.35	-0.21%	0.81	0.6498	0.8678	0.8799	0.2040	1.7%	3.9%	8.0%	11.2%	2.85
13 CIBC Managed Aggressive Growth Portfolio	F	0.88%	2.31%	0.35	-0.22%	0.79	0.5820	0.8690	0.9077	0.3185	0.0%	3.1%	7.0%	10.7%	2.48
14 Counsel All Equity Portfolio	F	0.88%	2.37%	0.34	-0.20%	0.78	0.6519	0.8070	0.8933	0.2445	-0.2%	0.6%	5.6%	10.7%	3.09
15 Desjardins Chorus II Maximum Growth Fund	F	0.72%	1.98%	0.33	-0.20%	0.83	0.6842	0.7829	0.9028	0.3315	0.5%	4.8%	5.9%	8.7%	2.28
16 DynamicEdge Equity Class Portfolio	F	0.88%	2.52%	0.32	-0.26%	0.83	0.5456	0.8461	0.8375	0.2575	-1.4%	-0.3%	6.6%	10.7%	2.47
17 DynamicEdge Equity Portfolio	F	0.88%	2.53%	0.32	-0.27%	0.83	0.5392	0.8472	0.8350	0.2573	-1.5%	-0.3%	6.6%	10.7%	2.45
18 Marquis Equity Portfolio	F	0.87%	2.53%	0.32	-0.25%	0.82	0.6612	0.8162	0.8371	0.1319	0.2%	1.4%	5.5%	10.6%	2.70
19 Franklin Quotential Global Growth Portfolio A	F	0.90%	2.68%	0.31	-0.38%	0.93	0.5711	0.8651	0.9254	0.1943	2.6%	0.7%	6.0%	10.9%	2.57
20 Desjardins Chorus II Maximum Growth Corp. Class	F	0.68%	1.97%	0.31	-0.19%	0.79	0.7460	0.7528	0.8674	0.2439	1.3%	6.5%	5.5%	8.3%	2.30
21 Axiom All Equity Portfolio	F	0.85%	2.52%	0.31	-0.34%	0.86	0.6394	0.8455	0.9095	0.2412	1.3%	3.5%	7.1%	10.3%	2.75
22 AGF Elements Global Portfolio	F	0.87%	2.63%	0.31	-0.39%	0.92	0.5363	0.8959	0.9009	0.2391	2.9%	1.3%	7.9%	10.6%	2.45
23 BMO Equity Growth ETF Portfolio Fund	F	0.76%	2.68%	0.26	-0.39%	0.83	0.7455	0.7404	0.8211	0.1314	3.4%	7.3%	7.8%	9.0%	1.77
<b>Category Average</b>		<b>0.88%</b>	<b>2.40%</b>	<b>0.34</b>	<b>-0.19%</b>	<b>0.81</b>	<b>0.6587</b>	<b>0.8228</b>	<b>0.8577</b>	<b>0.1937</b>	<b>1.9%</b>	<b>4.4%</b>	<b>7.1%</b>	<b>10.8%</b>	<b>2.45</b>



# Paterson & Associates—Monthly WRAP Fund Report

## Methodology & Ratings Definitions

December 2016

### 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%	B
55% to 65%	C
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.



# Paterson & Associates—Monthly WRAP Fund Report

## Disclaimer

December 2016

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 patterns. 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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## About Us:

Paterson & Associates is an independent consulting firm specializing in providing research and due diligence on a number of different investment products including mutual funds, hedge funds and other exempt market products.

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