

Monthly WRAP Fund Report

Prepared June 12, 2018

Prepared By:
David Paterson, CFA
(416) 706-5087

Paterson & Associates - Monthly WRAP Fund Report

May 2018

							Correlations				Returns					
Name	Rating	Average	Monthly	Sharpe	Alpha	Beta	TSX	S&P 500	MSCI	Cdn.	3 Month	1 Year	3 Year	5 Year	MER	
		Monthly	Standard						EAFE	Universe						
Conservative Portfolios		Typical Asset Mix: 70% - 90% Fixed Income / 10% - 30% Equity														
1	RBC Strategic Monthly Income Bond	B	0.43%	1.17%	0.32	0.15%	0.99	0.2973	0.6197	0.7070	0.7713	-1.3%	-2.4%	2.7%	N/A	1.86
2	Marquis Balanced Income Portfolio	C	0.42%	1.22%	0.30	0.11%	0.90	0.6889	0.7447	0.7764	0.5714	0.6%	0.0%	3.3%	5.1%	2.37
3	Scotia Partners Balanced Income Portfolio	C	0.36%	1.05%	0.29	0.06%	0.84	0.5383	0.7617	0.7759	0.7619	0.0%	-0.9%	2.5%	4.3%	2.14
4	DynamicEdge Conservative Class Portfolio	C	0.39%	1.15%	0.29	0.02%	0.75	0.4815	0.8213	0.8441	0.6304	0.2%	1.4%	2.6%	4.7%	2.01
5	Meritage Moderate Portfolio	C	0.37%	1.11%	0.28	0.06%	0.89	0.6050	0.7874	0.7968	0.7165	0.9%	0.8%	2.8%	4.5%	2.16
6	Scotia Select Balanced Income	C	0.37%	1.09%	0.28	0.07%	0.85	0.5110	0.8016	0.8024	0.7511	0.0%	-0.6%	2.3%	4.4%	1.88
7	Manulife Simplicity Moderate Portfolio	C	0.42%	1.29%	0.28	0.07%	1.00	0.5592	0.8178	0.8573	0.7045	0.1%	1.1%	2.7%	5.1%	2.09
8	Fidelity Income Portfolio	C	0.43%	1.38%	0.27	0.06%	1.04	0.3678	0.8061	0.7995	0.8031	1.0%	0.6%	2.4%	5.2%	2.37
9	CIBC Managed Income Plus Portfolio	C	0.35%	1.10%	0.27	0.06%	0.83	0.4963	0.8365	0.8692	0.7164	0.4%	0.7%	2.3%	4.2%	2.19
10	Meritas Income & Growth Portfolio	C	0.34%	1.04%	0.27	0.04%	0.83	0.5109	0.8065	0.7945	0.7721	0.7%	0.1%	2.4%	4.0%	2.06
11	Symmetry Conservative Income Portfolio	C	0.31%	0.94%	0.26	0.03%	0.78	0.5131	0.7357	0.7490	0.8028	0.4%	0.8%	2.5%	3.7%	1.85
12	TD Mgd Income Portfolio	C	0.35%	1.12%	0.26	0.04%	0.87	0.4340	0.8336	0.8244	0.7897	0.2%	0.3%	2.0%	4.2%	1.86
13	RBC Managed Payout Solution	C	0.31%	0.96%	0.26	0.03%	0.78	0.7714	0.6555	0.6668	0.6128	0.6%	0.4%	2.6%	3.7%	1.63
14	National Bank Conservative Strategy Portfolio	C	0.29%	0.95%	0.24	0.03%	0.75	0.6128	0.7633	0.8122	0.6915	0.3%	1.9%	2.4%	3.5%	1.75
15	Meritage Moderate Income Portfolio	C	0.32%	1.06%	0.24	0.01%	0.87	0.6487	0.7051	0.7379	0.7103	0.5%	0.0%	2.6%	3.8%	2.14
16	Desjardins Chorus II Balanced Income Fund	C	0.37%	1.29%	0.24	0.00%	1.03	0.5439	0.7612	0.8373	0.7522	0.0%	0.0%	2.3%	4.4%	1.82
17	Desjardins Chorus II Balanced Income Corp. Class	C	0.35%	1.27%	0.23	0.01%	0.97	0.6297	0.7687	0.8389	0.6459	0.0%	0.9%	2.6%	4.2%	1.85
18	DynamicEdge Defensive Portfolio	C	0.25%	0.87%	0.22	0.02%	0.65	0.4852	0.7571	0.7913	0.7220	0.0%	0.0%	1.4%	3.0%	1.96
19	BMO Select Trust Income Portfolio	C	0.31%	1.17%	0.22	-0.02%	0.93	0.4035	0.7744	0.7806	0.8352	0.4%	-0.1%	2.0%	3.7%	1.87
20	National Bank Income Managed Portfolio	C	0.26%	1.03%	0.19	0.01%	0.70	0.7974	0.6380	0.6969	0.4056	0.4%	1.8%	1.9%	3.0%	0.00
21	National Bank Stable Income Managed Portfolio	C	0.13%	0.67%	0.10	-0.03%	0.46	0.6921	0.5098	0.5975	0.4989	0.3%	1.3%	1.4%	1.5%	0.00
22	Symmetry Conservative Portfolio	D	0.36%	1.09%	0.27	-0.01%	0.75	0.5649	0.8121	0.8152	0.7032	0.4%	1.1%	2.6%	4.3%	2.16
23	Fidelity Global Income Portfolio	D	0.50%	1.64%	0.27	-0.08%	1.18	0.2482	0.8156	0.8075	0.7820	0.5%	0.4%	3.1%	6.0%	2.37
24	RBC Select Very Conservative Portfolio	D	0.32%	0.98%	0.26	0.03%	0.81	0.5089	0.7595	0.7752	0.8094	0.6%	0.1%	2.2%	3.8%	1.69
25	SEI Conservative Monthly Income Class S	D	0.33%	1.01%	0.26	0.02%	0.86	0.5637	0.7206	0.7613	0.8091	0.6%	-0.2%	1.9%	3.9%	1.70
26	Scotia Partners Income Portfolio	D	0.30%	0.93%	0.26	0.00%	0.63	0.5475	0.6858	0.7265	0.7772	-0.2%	-1.1%	2.0%	3.7%	2.04
27	Sun Life Granite Conservative Portfolio Series A	D	0.36%	1.17%	0.26	-0.05%	0.85	0.4355	0.7902	0.8312	0.7896	0.4%	0.1%	2.1%	4.3%	0.00
28	Scotia Selected Income Portfolio	D	0.30%	1.01%	0.24	0.01%	0.82	0.4803	0.7285	0.7316	0.8133	0.0%	-1.2%	1.7%	3.7%	1.77
29	Empire Life Emblem Conservative Portfolio	D	0.32%	1.11%	0.24	0.01%	0.88	0.5939	0.7993	0.7762	0.7116	0.7%	-0.6%	1.3%	3.9%	2.05
30	Renaissance Optimal Conservative Income Portfolio	D	0.29%	1.00%	0.24	0.00%	0.82	0.4070	0.6380	0.6867	0.8838	0.7%	-1.8%	1.6%	N/A	1.62
31	TD Comfort Balanced Income Portfolio	D	0.30%	1.06%	0.23	-0.10%	0.49	0.6422	0.7640	0.7770	0.7202	0.4%	-0.7%	1.6%	3.6%	1.75
32	CIBC Managed Income Portfolio	D	0.26%	0.88%	0.22	0.01%	0.70	0.4045	0.7670	0.8067	0.8340	0.2%	-0.3%	1.6%	3.1%	1.80
33	SEI Income 20/80 Class S	D	0.28%	0.97%	0.22	-0.02%	0.84	0.4914	0.6827	0.7324	0.8761	0.7%	0.0%	1.6%	3.3%	1.43
34	TD Advantage Balanced Income Portfolio	D	0.32%	1.17%	0.22	-0.02%	0.96	0.4631	0.7842	0.7714	0.8229	0.2%	-0.8%	1.7%	3.9%	1.97
35	Scotia INNOVA Income Portfolio	D	0.26%	0.92%	0.22	-0.01%	0.76	0.4359	0.7136	0.7258	0.8552	0.0%	-1.0%	1.6%	3.2%	1.85
36	Renaissance Optimal Income Portfolio	D	0.34%	1.29%	0.22	-0.05%	1.10	0.6115	0.6444	0.7384	0.7731	0.8%	-2.4%	2.0%	4.1%	1.98
37	Desjardins Chorus II Conservative Fund	D	0.30%	1.13%	0.21	-0.03%	0.93	0.5065	0.7257	0.8016	0.8116	0.0%	-0.5%	1.8%	3.6%	1.73
38	Manulife Simplicity Conservative Portfolio	D	0.29%	1.10%	0.21	-0.04%	0.92	0.4533	0.7126	0.7545	0.8672	0.1%	-0.4%	1.7%	3.4%	1.90
39	Quadrus Moderate Folio	D	0.30%	1.16%	0.21	-0.03%	0.94	0.6376	0.7700	0.8175	0.7019	0.3%	-0.3%	1.5%	3.6%	2.36
40	Meritage Conservative Portfolio	D	0.26%	0.99%	0.21	-0.03%	0.82	0.4830	0.7267	0.7545	0.8315	0.2%	-0.8%	1.8%	3.1%	2.15
41	Desjardins Chorus II Conservative Corp. Class	D	0.28%	1.11%	0.20	-0.03%	0.87	0.6098	0.7379	0.8109	0.6881	-0.1%	0.5%	2.1%	3.4%	1.77

Financial Information provided by Fundata Canada. (c) Fundata Canada. All Rights Reserved. Past performance does not guarantee future performance. For additional information, your attention is directed to the notes section at the end of this document.

Paterson & Associates - Monthly WRAP Fund Report

May 2018

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
42 National Bank Conservative Diversified	D	0.25%	0.94%	0.20	-0.03%	0.78	0.4949	0.7344	0.7448	0.8241	0.3%	1.3%	1.7%	3.0%	1.91
43 TD Target Return Conservative Fund	D	0.05%	1.10%	0.00	-0.09%	0.29	0.7154	0.3199	0.4030	0.2310	-0.9%	-2.1%	-0.1%	0.6%	1.70
44 CI Portfolio Series Income Fund Class A	F	0.36%	1.19%	0.25	-0.06%	0.86	0.3493	0.7955	0.8174	0.7856	-0.4%	-1.8%	2.0%	4.4%	2.01
45 TD Mgd Index Income Portfolio	F	0.38%	1.27%	0.25	-0.08%	0.94	0.4488	0.7618	0.7913	0.8549	0.7%	0.0%	2.1%	4.6%	1.49
46 Counsel Conservative Portfolio	F	0.35%	1.30%	0.23	-0.10%	0.92	0.4241	0.8027	0.8691	0.7453	-0.1%	0.5%	2.4%	4.2%	2.79
47 AGF Elements Yield Portfolio	F	0.35%	1.34%	0.22	-0.10%	0.92	0.3665	0.7518	0.7969	0.7498	-1.2%	-1.7%	2.4%	4.2%	2.03
48 Desjardins Melodia Conservative Income Portfolio	F	0.28%	1.06%	0.21	-0.09%	0.75	0.5050	0.6720	0.7351	0.8427	0.3%	-1.4%	1.7%	3.3%	1.96
49 BMO FundSelect Income Portfolio Series A	F	0.28%	1.06%	0.21	-0.10%	0.77	0.4247	0.7865	0.7988	0.8208	0.0%	-0.5%	1.6%	3.3%	2.42
50 BMO SelectClass Income Portfolio Series A	F	0.28%	1.19%	0.19	-0.14%	0.86	0.4220	0.7770	0.7855	0.8233	0.2%	-0.6%	1.1%	3.3%	2.33
51 BMO Income ETF Portfolio Advisor Class	F	0.28%	1.21%	0.19	-0.07%	0.99	0.4564	0.7314	0.7556	0.8400	0.1%	-1.3%	1.2%	3.4%	1.67
52 TD Comfort Conservative Income	F	0.22%	0.86%	0.18	-0.05%	0.74	0.5388	0.6920	0.7143	0.8419	0.2%	-1.4%	1.0%	2.6%	1.53
53 Empire Life Emblem Diversified Income Portfolio	F	0.24%	0.99%	0.18	-0.04%	0.78	0.3538	0.7502	0.7278	0.8820	0.6%	-0.8%	1.1%	N/A	1.90
54 Invesco Intactive Diversified Income Portfolio	F	0.28%	1.22%	0.18	-0.12%	0.81	0.6336	0.6250	0.7076	0.7759	0.6%	1.8%	2.0%	3.3%	1.98
55 Desjardins Melodia Very Conservative Income Port	F	0.23%	0.98%	0.18	-0.11%	0.70	0.4346	0.6318	0.6876	0.8974	0.3%	-1.7%	1.2%	2.8%	1.91
56 Quadrus Conservative Folio	F	0.23%	1.04%	0.16	-0.09%	0.88	0.5461	0.7042	0.7558	0.8258	0.2%	-0.9%	1.1%	2.7%	2.24
57 Meritage Conservative Income Portfolio	F	0.20%	0.91%	0.16	-0.07%	0.78	0.5353	0.6314	0.6585	0.8385	0.1%	-1.4%	1.5%	2.4%	2.10
58 Franklin Quotential Diversified Income Portfolio T	F	0.19%	1.25%	0.11	-0.21%	0.83	0.3891	0.6884	0.7631	0.7489	0.1%	-0.8%	0.9%	2.3%	1.96
59 SEI Income 100 Class S	F	0.13%	0.85%	0.09	-0.12%	0.91	0.2386	0.4510	0.4888	0.9839	0.2%	-1.8%	0.5%	1.6%	1.47
60 Counsel Managed Yield Portfolio	F	0.13%	1.14%	0.06	-0.20%	0.92	0.5466	0.5302	0.6408	0.7587	-0.5%	-2.1%	0.5%	1.5%	2.64
Category Average		0.30%	1.09%	0.22	-0.02%	0.83	0.5083	0.7220	0.7567	0.7599	0.2%	-0.3%	1.9%	3.6%	1.87

Balanced Portfolios

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

1 PH&N Balanced Fund Series D	A	0.71%	1.54%	0.42	0.29%	0.84	0.6906	0.7963	0.8503	0.5955	2.2%	5.2%	5.7%	8.7%	0.88
2 Scotia Partners Balanced Growth Portfolio	A	0.52%	1.39%	0.33	0.21%	0.54	0.6063	0.8459	0.8397	0.5864	0.4%	1.2%	3.8%	6.2%	2.24
3 Manulife Strategic Balanced Yield Portfolio	B	0.73%	1.79%	0.37	0.17%	0.68	0.5064	0.8105	0.6333	0.2421	-1.3%	4.0%	5.5%	8.9%	2.25
4 Meritas Growth & Income Portfolio	B	0.55%	1.44%	0.34	0.21%	0.67	0.5800	0.8743	0.8557	0.5469	1.0%	2.5%	4.5%	6.7%	2.41
5 National Bank Moderate Strategic Portfolio	B	0.46%	1.29%	0.31	0.12%	0.96	0.6035	0.8291	0.8537	0.6270	0.5%	2.7%	3.5%	5.5%	2.07
6 Empire Life Emblem Moderate Growth Portfolio	B	0.50%	1.49%	0.30	0.13%	0.65	0.7247	0.8008	0.7647	0.4295	1.2%	0.6%	2.9%	6.0%	2.35
7 Mawer Balanced Fund Class A	C	0.79%	1.63%	0.45	0.12%	0.81	0.4250	0.8907	0.8685	0.6259	0.8%	3.5%	5.9%	9.7%	0.92
8 Compass Balanced Portfolio	C	0.61%	1.31%	0.42	0.14%	0.57	0.7038	0.7934	0.7803	0.4417	1.4%	4.0%	5.0%	7.5%	1.90
9 Meritage Growth Income Portfolio	C	0.48%	1.35%	0.31	0.09%	0.76	0.7781	0.7415	0.7422	0.4479	1.2%	2.0%	4.0%	5.8%	2.39
10 Meritage Growth Portfolio	C	0.51%	1.53%	0.29	0.09%	0.83	0.7302	0.7888	0.8147	0.4689	1.5%	2.1%	3.5%	6.1%	2.44
11 SEI Income 40/60 Class S	C	0.42%	1.23%	0.29	0.07%	0.98	0.5789	0.8043	0.8448	0.7255	1.0%	1.7%	2.6%	5.1%	1.63
12 Meritage Balanced Portfolio	C	0.43%	1.32%	0.28	0.07%	0.72	0.6965	0.7823	0.8124	0.5929	1.2%	1.6%	3.1%	5.2%	2.42
13 Axiom Balanced Income Portfolio	C	0.40%	1.22%	0.28	0.04%	1.01	0.6254	0.7601	0.8026	0.7374	0.9%	1.5%	2.9%	4.8%	2.08
14 Meritage Balanced Income Portfolio	C	0.38%	1.17%	0.28	0.05%	0.66	0.7250	0.7436	0.7460	0.5840	0.9%	1.0%	3.2%	4.6%	2.39
15 RBC Select Choices Conservative Portfolio	C	0.37%	1.14%	0.28	0.06%	0.90	0.6181	0.8085	0.8193	0.6883	0.4%	0.1%	2.2%	4.5%	1.95
16 Empire Life Emblem Balanced Portfolio	C	0.40%	1.28%	0.27	0.07%	0.67	0.6641	0.8151	0.7856	0.5766	0.9%	0.0%	2.0%	4.9%	2.25
17 Scotia INNOVA Balanced Income Portfolio	C	0.35%	1.10%	0.27	0.05%	0.86	0.5113	0.8154	0.8145	0.7447	0.1%	-0.4%	2.2%	4.2%	1.97
18 National Bank Moderate Diversified	C	0.37%	1.19%	0.26	0.03%	0.96	0.6005	0.7720	0.7926	0.7287	0.6%	2.2%	2.4%	4.4%	2.21
19 National Bank Income and Growth Managed Portfolio	C	0.38%	1.35%	0.24	0.09%	0.83	0.7998	0.6652	0.7079	0.3264	0.7%	3.5%	3.0%	4.5%	0.00

Financial Information provided by Fundata Canada. (c) Fundata Canada. All Rights Reserved. Past performance does not guarantee future performance. For additional information, your attention is directed to the notes section at the end of this document.

Paterson & Associates - Monthly WRAP Fund Report

May 2018

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
20 BMO Matchmaker Strategic Balanced Portfolio	D	0.52%	1.37%	0.34	-0.02%	0.66	0.6138	0.8616	0.8169	0.6028	1.3%	3.1%	3.8%	6.4%	0.00
21 RBC Select Choices Balanced Portfolio	D	0.55%	1.47%	0.33	-0.02%	0.68	0.6629	0.8418	0.8379	0.5009	0.3%	2.1%	3.7%	6.7%	2.16
22 Scotia Selected Balanced Growth	D	0.52%	1.39%	0.33	-0.04%	0.67	0.5812	0.8557	0.8632	0.5785	0.2%	1.4%	3.8%	6.3%	2.00
23 National Bank Balanced Strategic Portfolio	D	0.58%	1.57%	0.33	-0.05%	0.76	0.6002	0.8595	0.8789	0.5474	0.2%	2.5%	3.7%	7.1%	2.24
24 SEI Balanced 60/40 Class S	D	0.56%	1.53%	0.32	-0.06%	0.74	0.6390	0.8333	0.8752	0.6015	1.4%	3.2%	3.7%	6.7%	1.79
25 National Bank Balanced Diversified	D	0.55%	1.52%	0.32	-0.06%	0.74	0.5861	0.8401	0.8506	0.6071	0.3%	3.0%	3.6%	6.6%	2.49
26 DynamicEdge Balanced Growth Class Portfolio	D	0.64%	1.81%	0.32	-0.07%	0.85	0.4682	0.8434	0.8502	0.4805	0.7%	5.2%	4.5%	7.7%	2.36
27 DynamicEdge Balanced Growth Portfolio	D	0.63%	1.81%	0.32	-0.08%	0.85	0.4692	0.8478	0.8531	0.4851	0.6%	4.7%	4.3%	7.6%	2.34
28 Marquis Balanced Growth Portfolio	D	0.58%	1.68%	0.31	-0.07%	0.79	0.5721	0.8405	0.8672	0.4619	1.3%	5.1%	3.6%	7.0%	2.54
29 Renaissance Optimal Growth & Income Portfolio	D	0.49%	1.38%	0.31	-0.04%	0.63	0.6199	0.7692	0.7725	0.6470	1.2%	-2.0%	3.3%	N/A	2.04
30 Scotia INNOVA Balanced Growth Portfolio	D	0.50%	1.42%	0.31	-0.09%	0.71	0.5292	0.8799	0.8676	0.6257	0.3%	0.7%	3.3%	6.0%	2.09
31 DynamicEdge Balanced Portfolio	D	0.51%	1.51%	0.30	-0.08%	0.72	0.4697	0.8344	0.8485	0.5324	0.4%	3.5%	3.4%	6.2%	2.23
32 DynamicEdge Balanced Class Portfolio	D	0.51%	1.50%	0.30	-0.08%	0.71	0.4811	0.8307	0.8464	0.5320	0.4%	3.4%	3.3%	6.1%	2.25
33 CC&L Diversified Income Portfolio	D	0.46%	1.35%	0.29	-0.07%	0.64	0.6090	0.8364	0.8162	0.6025	0.6%	-0.3%	2.3%	5.5%	2.11
34 TD Comfort Balanced Growth Portfolio	D	0.48%	1.45%	0.29	-0.08%	0.68	0.6868	0.8258	0.8173	0.5778	1.1%	1.0%	3.3%	5.8%	2.02
35 Marquis Balanced Portfolio	D	0.47%	1.40%	0.29	-0.08%	0.66	0.5796	0.8311	0.8646	0.5125	0.7%	3.1%	2.7%	5.6%	2.56
36 Axiom Diversified Monthly Income Portfolio	D	0.43%	1.36%	0.27	-0.01%	0.87	0.9070	0.5628	0.6063	0.4130	2.0%	2.5%	3.1%	5.2%	2.21
37 TD Comfort Balanced Portfolio	D	0.41%	1.28%	0.27	-0.08%	0.59	0.6933	0.7935	0.7941	0.6214	0.7%	0.2%	2.5%	4.9%	1.91
38 Desjardins Melodia Diversified Income Portfolio	D	0.42%	1.37%	0.26	-0.09%	0.61	0.6601	0.7279	0.7961	0.6307	0.4%	-0.2%	3.0%	5.0%	2.24
39 Quadrus Balanced Folio	D	0.44%	1.48%	0.26	-0.13%	0.68	0.7290	0.7957	0.8531	0.5084	0.8%	2.0%	2.9%	5.2%	2.43
40 Desjardins Melodia Moderate Income Portfolio	D	0.32%	1.16%	0.23	-0.11%	0.52	0.5806	0.7033	0.7673	0.7554	0.3%	-0.9%	2.0%	3.8%	2.09
41 Counsel Managed Portfolio	D	0.38%	1.45%	0.22	-0.10%	0.58	0.7839	0.6849	0.7462	0.4377	0.6%	3.4%	2.7%	4.5%	2.96
42 Counsel Managed High Yield Portfolio	D	0.33%	1.39%	0.19	-0.16%	0.59	0.4878	0.6386	0.7306	0.7645	-0.5%	-0.6%	2.4%	3.9%	2.76
43 Invesco Intactive Balanced Growth Portfolio Ser A	D	0.34%	1.52%	0.18	-0.17%	0.61	0.7852	0.6353	0.7320	0.5491	0.6%	3.2%	2.2%	4.0%	2.28
44 Invesco Intactive Balanced Income Portfolio Ser A	D	0.29%	1.33%	0.17	-0.17%	0.55	0.6850	0.6323	0.7215	0.7193	0.7%	2.2%	1.9%	3.4%	2.15
45 BMO Balanced Yield Plus ETF Portfolio	D	0.25%	1.30%	0.15	-0.16%	0.50	0.7362	0.6549	0.6711	0.4888	0.6%	-0.5%	1.6%	2.9%	1.71
46 TD Target Return Balanced Fund	D	0.04%	1.55%	-0.01	-0.15%	0.23	0.7328	0.2240	0.3213	0.1264	-1.2%	-2.4%	-1.0%	0.4%	2.25
47 Sun Life Granite Balanced Portfolio A (CAD)	F	0.61%	1.65%	0.33	-0.08%	0.83	0.5186	0.8733	0.8972	0.6319	1.2%	2.8%	4.4%	7.4%	0.00
48 TD Mgd Index Balanced Growth Portfolio	F	0.59%	1.63%	0.32	-0.09%	0.82	0.5676	0.8725	0.8926	0.6459	1.1%	2.5%	4.1%	7.1%	1.60
49 Manulife Simplicity Global Balanced Portfolio	F	0.58%	1.61%	0.32	-0.09%	0.81	0.5082	0.8828	0.9090	0.5841	-0.3%	2.5%	3.6%	7.0%	2.51
50 Fidelity Balanced Portfolio	F	0.57%	1.61%	0.32	-0.09%	0.80	0.4698	0.8522	0.8530	0.7092	1.6%	2.8%	3.6%	6.9%	2.44
51 BMO SelectTrust Balanced Portfolio	F	0.56%	1.63%	0.31	-0.10%	0.80	0.5355	0.8747	0.8739	0.6097	0.9%	3.1%	4.0%	6.8%	2.19
52 TD Mgd Balanced Growth Portfolio	F	0.57%	1.64%	0.31	-0.12%	0.83	0.5301	0.8992	0.8974	0.5984	0.6%	2.3%	3.6%	6.9%	2.20
53 Manulife Simplicity Balanced Fund	F	0.54%	1.54%	0.31	-0.10%	0.77	0.5667	0.8757	0.8929	0.5781	-0.2%	2.1%	3.5%	6.5%	2.51
54 TD Mgd Index Income & Moderate Growth Portfolio	F	0.49%	1.44%	0.30	-0.10%	0.72	0.5301	0.8331	0.8599	0.7437	1.0%	1.3%	3.1%	5.9%	1.53
55 CIBC Managed Balanced Portfolio	F	0.49%	1.46%	0.30	-0.11%	0.73	0.5429	0.8577	0.8923	0.6364	1.1%	1.9%	3.3%	6.0%	2.25
56 TD Mgd Inc & Mod Growth Portfolio	F	0.46%	1.37%	0.30	-0.11%	0.70	0.4898	0.8830	0.8738	0.6836	0.3%	1.3%	2.9%	5.6%	2.06
57 TD Mgd Income & Moderate Growth Portfolio	F	0.46%	1.37%	0.30	-0.11%	0.70	0.4898	0.8830	0.8738	0.6836	0.3%	1.3%	2.9%	5.6%	2.06
58 TD Advantage Balanced Growth Portfolio	F	0.50%	1.52%	0.29	-0.10%	0.73	0.6273	0.8703	0.8475	0.5529	0.6%	1.3%	3.2%	6.1%	2.20
59 Desjardins Melodia Balanced Growth Portfolio	F	0.51%	1.56%	0.29	-0.11%	0.75	0.5913	0.7993	0.8744	0.6281	0.6%	3.7%	3.8%	6.2%	2.31
60 BMO FundSelect Balanced Portfolio Series A	F	0.50%	1.56%	0.29	-0.14%	0.77	0.5390	0.8961	0.8808	0.5677	0.3%	2.3%	3.5%	6.1%	2.59
61 Desjardins Chorus II Growth Fund	F	0.51%	1.58%	0.28	-0.12%	0.76	0.5987	0.7956	0.8758	0.6291	-0.1%	2.2%	3.7%	6.1%	2.01
62 AGF Elements Balanced Portfolio	F	0.55%	1.75%	0.28	-0.18%	0.88	0.4994	0.8992	0.9115	0.5603	-0.2%	1.6%	3.6%	6.6%	2.38
63 Symmetry Balanced Portfolio	F	0.44%	1.37%	0.28	-0.10%	0.66	0.5894	0.8629	0.8457	0.5589	1.0%	1.6%	3.0%	5.3%	2.27

Financial Information provided by Fundata Canada. (c) Fundata Canada. All Rights Reserved. Past performance does not guarantee future performance. For additional information, your attention is directed to the notes section at the end of this document.

Paterson & Associates - Monthly WRAP Fund Report

May 2018

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
64 Counsel Balanced Portfolio	F	0.49%	1.55%	0.28	-0.15%	0.77	0.4759	0.8377	0.9056	0.6554	0.3%	2.4%	3.5%	5.9%	2.86
65 CI Portfolio Series Conservative Balanced Fnd CI A	F	0.46%	1.42%	0.28	-0.13%	0.70	0.5457	0.8768	0.8709	0.6046	0.1%	-0.5%	2.2%	5.5%	2.46
66 BMO SelectClass Balanced Portfolio Series A	F	0.51%	1.64%	0.28	-0.15%	0.81	0.5422	0.8715	0.8697	0.6015	0.8%	3.1%	3.5%	6.2%	2.50
67 Scotia INNOVA Balanced Income Portfolio	F	0.39%	1.20%	0.27	-0.10%	0.59	0.5188	0.8618	0.8299	0.6832	0.1%	0.4%	2.7%	4.7%	1.94
68 Symmetry Moderate Growth Portfolio	F	0.50%	1.60%	0.27	-0.14%	0.76	0.5926	0.8776	0.8572	0.4731	0.1%	2.0%	3.2%	6.0%	2.25
69 BMO Balanced ETF Portfolio Class	F	0.51%	1.66%	0.27	-0.14%	0.79	0.6283	0.8268	0.8466	0.5685	0.7%	1.7%	3.4%	6.1%	1.72
70 TD Advantage Balanced Portfolio	F	0.41%	1.31%	0.27	-0.12%	0.64	0.5676	0.8491	0.8284	0.6823	0.5%	0.3%	2.4%	5.0%	2.07
71 Desjardins Melodia Diversified Growth Portfolio	F	0.43%	1.41%	0.27	-0.12%	0.67	0.5705	0.7744	0.8537	0.6941	0.5%	2.6%	3.2%	5.2%	2.22
72 Franklin Quotential Balanced Growth Portfolio A	F	0.51%	1.68%	0.27	-0.19%	0.71	0.5585	0.8628	0.9187	0.5189	0.4%	1.5%	2.0%	6.1%	2.31
73 Desjardins Chorus II Growth Corporate Class	F	0.48%	1.59%	0.26	-0.13%	0.73	0.6643	0.7821	0.8545	0.5455	-0.1%	2.0%	3.6%	5.7%	2.07
74 CI Portfolio Series Conservative Fund Class A	F	0.40%	1.33%	0.25	-0.15%	0.66	0.4654	0.8576	0.8620	0.7014	0.1%	-1.1%	1.8%	4.8%	2.32
75 AGF Elements Conservative Portfolio	F	0.44%	1.50%	0.25	-0.19%	0.76	0.3912	0.8745	0.8827	0.6819	-0.2%	0.0%	2.8%	5.2%	2.37
76 Desjardins Chorus II Balanced Growth Fund	F	0.42%	1.43%	0.25	-0.15%	0.69	0.5893	0.7822	0.8603	0.6845	0.0%	0.4%	2.6%	5.0%	1.88
77 Desjardins Melodia Moderate Growth Portfolio	F	0.38%	1.28%	0.25	-0.13%	0.61	0.5304	0.7544	0.8286	0.7630	0.3%	1.2%	2.4%	4.5%	2.15
78 Desjardins Chorus II Balanced Growth Corp. Class	F	0.40%	1.40%	0.25	-0.13%	0.65	0.6541	0.7800	0.8503	0.6031	0.0%	1.1%	2.9%	4.8%	1.92
79 Franklin Quotential Balanced Income Portfolio A	F	0.41%	1.42%	0.25	-0.18%	0.70	0.5133	0.8436	0.9060	0.6307	0.3%	0.5%	1.5%	4.9%	2.12
80 Scotia Global Balanced	F	0.51%	1.98%	0.23	-0.23%	0.89	0.1445	0.7957	0.7718	0.6316	-0.9%	-1.5%	1.6%	6.1%	2.00
81 CIBC Managed Monthly Income Balanced Portfolio	F	0.32%	1.18%	0.22	-0.05%	0.73	0.8320	0.6433	0.7087	0.5357	1.2%	-0.5%	1.5%	3.8%	2.22
Category Average		0.47%	1.46%	0.28	-0.06%	0.72	0.5938	0.8035	0.8229	0.5863	0.6%	1.7%	3.1%	5.7%	2.09

Growth Portfolios

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

1	Meritas Growth Portfolio	B	0.66%	1.66%	0.36	0.29%	0.74	0.5780	0.8918	0.8600	0.4548	1.1%	3.2%	5.4%	8.0%	2.50
2	Sun Life Granite Growth Portfolio Series A	B	0.72%	1.91%	0.35	0.10%	1.27	0.5292	0.8824	0.9039	0.5924	1.4%	3.6%	4.9%	8.8%	0.00
3	DynamicEdge Growth Portfolio	B	0.77%	2.14%	0.33	0.16%	1.24	0.4516	0.8489	0.8464	0.4519	0.9%	6.7%	5.6%	9.3%	2.43
4	DynamicEdge Growth Class Portfolio	B	0.76%	2.14%	0.33	0.16%	1.24	0.4540	0.8484	0.8489	0.4514	0.9%	6.5%	5.5%	9.3%	2.45
5	Empire Life Emblem Growth Portfolio	B	0.58%	1.74%	0.30	0.14%	0.78	0.7698	0.7491	0.7142	0.3045	1.5%	1.1%	3.7%	7.0%	2.40
6	Meritage Equity Income Portfolio	B	0.52%	1.56%	0.30	0.11%	0.73	0.7960	0.7168	0.7273	0.3561	1.3%	2.7%	4.4%	6.3%	2.50
7	Axiom Long-Term Growth Portfolio	C	0.57%	1.67%	0.30	0.09%	0.84	0.8448	0.6781	0.7584	0.3958	2.1%	5.1%	4.5%	6.8%	2.37
8	Fidelity Growth Portfolio	D	0.73%	1.84%	0.37	-0.03%	0.78	0.5549	0.8814	0.8712	0.5642	2.3%	5.7%	5.1%	8.9%	2.47
9	BMO Matchmaker Strategic Growth Portfolio	D	0.68%	1.76%	0.36	0.00%	0.70	0.6528	0.8349	0.8215	0.4860	1.4%	4.7%	5.0%	8.3%	0.00
10	SEI Growth 80/20 Class S	D	0.69%	1.81%	0.35	-0.04%	0.75	0.6565	0.8531	0.8841	0.4725	1.6%	5.0%	4.7%	8.4%	1.86
11	Fidelity Global Growth Portfolio	D	0.84%	2.24%	0.35	-0.11%	0.97	0.3991	0.9077	0.8894	0.5788	1.6%	6.6%	6.2%	10.2%	2.50
12	Scotia Partners Growth Portfolio	D	0.63%	1.67%	0.34	-0.04%	0.69	0.5986	0.8654	0.8498	0.4981	0.4%	2.5%	4.6%	7.6%	2.35
13	Sun Life Granite Balanced Growth Port A (CAD)	D	0.63%	1.72%	0.33	-0.10%	0.74	0.5172	0.8721	0.8970	0.6241	1.0%	2.2%	3.8%	7.6%	0.00
14	Marquis Growth Portfolio	D	0.70%	1.95%	0.33	-0.07%	0.79	0.5633	0.8472	0.8602	0.4182	1.4%	6.6%	4.4%	8.5%	2.54
15	Desjardins Melodia Maximum Growth Portfolio	D	0.69%	1.97%	0.32	-0.09%	0.81	0.6190	0.8245	0.8911	0.5061	1.1%	6.4%	5.3%	8.4%	2.56
16	Desjardins Melodia Aggressive Growth Portfolio	D	0.62%	1.80%	0.31	-0.10%	0.74	0.6146	0.8155	0.8869	0.5464	0.9%	5.4%	4.8%	7.5%	2.47
17	TD Advantage Growth Portfolio	D	0.60%	1.74%	0.31	-0.10%	0.72	0.6648	0.8668	0.8437	0.4460	0.7%	2.3%	3.9%	7.3%	2.27
18	Sun Life Granite Moderate Portfolio Series A	D	0.50%	1.43%	0.31	-0.09%	0.72	0.4949	0.8505	0.8812	0.6875	0.7%	1.4%	3.2%	6.1%	0.00
19	Counsel Growth Portfolio	D	0.61%	1.80%	0.31	0.04%	1.17	0.5098	0.8522	0.9179	0.5741	0.6%	4.0%	4.3%	7.4%	2.98

Financial Information provided by Fundata Canada. (c) Fundata Canada. All Rights Reserved. Past performance does not guarantee future performance. For additional information, your attention is directed to the notes section at the end of this document.

Paterson & Associates - Monthly WRAP Fund Report

May 2018

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
20 Axiom Canadian Growth Portfolio	D	0.46%	1.75%	0.23	-0.08%	0.95	0.9623	0.4019	0.4820	0.1874	3.1%	4.6%	3.3%	5.4%	2.32
21 Invesco Intactive Growth Portfolio Series A	D	0.39%	1.74%	0.19	-0.16%	0.56	0.8307	0.6220	0.7167	0.3690	0.5%	4.2%	2.5%	4.6%	2.34
22 Dynamic Diversified Real Asset Fund	D	0.50%	3.22%	0.14	-0.12%	1.10	0.5427	0.0029	0.1891	0.5005	3.4%	1.4%	4.7%	5.6%	2.41
23 TD Mgd Index Aggressive Growth Portfolio	F	0.73%	1.94%	0.34	-0.08%	0.83	0.6224	0.8831	0.9059	0.5200	1.5%	4.1%	5.2%	8.8%	1.63
24 Axiom Global Growth Portfolio	F	0.74%	2.03%	0.33	-0.12%	0.88	0.4972	0.8895	0.9249	0.5360	1.0%	5.6%	5.9%	8.9%	2.43
25 BMO SelectClass Growth Portfolio Series A	F	0.73%	2.02%	0.33	-0.11%	0.86	0.5207	0.8924	0.8853	0.5428	1.3%	5.1%	4.8%	8.9%	2.61
26 Axiom Foreign Growth Portfolio	F	0.90%	2.56%	0.33	-0.19%	1.12	0.3150	0.9130	0.9244	0.5312	0.5%	6.3%	7.2%	10.9%	2.42
27 TD Mgd Aggressive Growth Portfolio	F	0.68%	1.90%	0.33	-0.12%	0.82	0.5576	0.9067	0.9063	0.5126	0.8%	3.2%	4.4%	8.2%	2.29
28 Manulife Simplicity Growth Portfolio	F	0.65%	1.83%	0.33	-0.11%	0.78	0.5779	0.8853	0.9014	0.4940	-0.2%	3.1%	4.4%	7.9%	2.64
29 BMO FundSelect Growth Portfolio Series A	F	0.69%	1.94%	0.32	-0.11%	0.82	0.5682	0.9022	0.8799	0.4703	0.3%	3.7%	4.7%	8.3%	2.69
30 CIBC Managed Balanced Growth Portfolio	F	0.63%	1.80%	0.32	-0.12%	0.77	0.5124	0.8667	0.8964	0.6202	1.2%	3.3%	4.7%	7.6%	2.46
31 Fidelity Global Balanced Portfolio	F	0.66%	1.94%	0.31	-0.15%	0.82	0.3195	0.8676	0.8630	0.7046	0.9%	3.3%	4.5%	7.9%	2.45
32 CI Portfolio Series Growth Fund Class A	F	0.62%	1.86%	0.30	-0.11%	0.75	0.6460	0.8568	0.8530	0.3741	0.2%	1.5%	3.5%	7.5%	2.44
33 CI Portfolio Series Balanced Growth Fund Class A	F	0.57%	1.71%	0.30	-0.13%	0.71	0.6150	0.8757	0.8722	0.4594	0.0%	0.9%	3.2%	6.9%	2.45
34 AGF Elements Growth Portfolio	F	0.70%	2.23%	0.29	-0.25%	0.98	0.4290	0.9297	0.9173	0.4821	-0.2%	3.3%	5.3%	8.5%	2.38
35 CI Portfolio Series Balanced Fund Class A	F	0.50%	1.55%	0.29	-0.13%	0.66	0.5621	0.8897	0.8743	0.5371	0.1%	0.2%	2.6%	6.1%	2.43
36 Desjardins Chorus II High Growth Fund	F	0.59%	1.83%	0.29	-0.15%	0.75	0.6148	0.8130	0.8894	0.5481	0.0%	3.2%	4.4%	7.1%	2.22
37 Symmetry Growth Portfolio	F	0.59%	1.90%	0.28	-0.17%	0.78	0.6054	0.8737	0.8597	0.3943	0.3%	2.9%	3.8%	7.1%	2.44
38 Franklin Quotential Growth Portfolio A	F	0.61%	1.99%	0.28	-0.21%	0.84	0.5548	0.8740	0.9210	0.4389	0.5%	2.7%	2.4%	7.3%	2.41
39 Desjardins Chorus II High Growth Corp. Class	F	0.55%	1.82%	0.27	-0.15%	0.72	0.6771	0.7897	0.8608	0.4780	0.0%	3.1%	4.2%	6.6%	2.25
40 Quadrus Advanced Folio	F	0.55%	1.82%	0.27	-0.13%	0.70	0.7657	0.7822	0.8342	0.3897	1.3%	4.2%	3.7%	6.6%	2.48
41 Renaissance Optimal Inflation Opportunities Portfolio	F	0.30%	1.79%	0.14	-0.24%	0.66	0.3054	0.4905	0.6770	0.7465	-0.9%	1.7%	0.3%	3.5%	2.27
Category Average		0.63%	1.90%	0.30	-0.07%	0.84	0.5822	0.8072	0.8338	0.4938	0.9%	3.7%	4.4%	7.6%	2.17

Aggressive Growth Portfolios

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

1 Empire Life Emblem Aggressive Growth Portfolio	B	0.68%	2.04%	0.30	0.21%	0.70	0.7760	0.7386	0.7021	0.2263	1.6%	1.7%	4.5%	8.2%	2.55
2 Quadrus Aggressive Folio	C	0.67%	2.18%	0.28	0.17%	0.75	0.7780	0.7671	0.8158	0.2990	1.7%	5.7%	4.5%	8.0%	2.47
3 SEI Growth 100 Class S	D	0.82%	2.13%	0.36	-0.03%	0.71	0.6598	0.8530	0.8791	0.3786	2.0%	6.6%	5.7%	10.1%	1.89
4 DynamicEdge Equity Class Portfolio	D	0.94%	2.53%	0.35	-0.06%	0.83	0.4400	0.8497	0.8449	0.4199	1.2%	9.2%	7.1%	11.5%	2.46
5 DynamicEdge Equity Portfolio	D	0.94%	2.54%	0.35	-0.07%	0.83	0.4358	0.8518	0.8442	0.4247	1.2%	8.7%	6.9%	11.4%	2.44
6 Scotia Partners Maximum Growth Portfolio	D	0.70%	1.89%	0.34	-0.05%	0.78	0.6014	0.8717	0.8469	0.4435	0.6%	3.4%	5.0%	8.6%	2.46
7 Marquis Equity Portfolio	D	0.82%	2.31%	0.33	-0.10%	0.75	0.5528	0.8484	0.8545	0.3735	1.7%	8.4%	5.2%	10.0%	2.68
8 Counsel All Equity Portfolio	D	0.74%	2.08%	0.33	-0.11%	0.70	0.5246	0.8560	0.9194	0.5118	0.9%	5.7%	5.3%	9.0%	3.09
9 TD Advantage Aggressive Growth Portfolio	D	0.70%	2.01%	0.32	-0.09%	0.65	0.6870	0.8545	0.8306	0.3570	1.0%	3.4%	4.7%	8.5%	2.26
10 Invesco Intactive Maximum Growth Portfolio Ser A	D	0.49%	2.06%	0.21	-0.15%	0.52	0.8231	0.6171	0.6928	0.1949	0.2%	4.9%	2.9%	5.8%	2.42
11 TD U.S. Equity Portfolio	F	1.38%	3.27%	0.40	-0.18%	1.09	0.2546	0.9732	0.7891	0.4249	2.1%	10.4%	11.2%	17.1%	2.36
12 TD Mgd Index Max Eqty Growth Portfolio	F	0.87%	2.28%	0.36	-0.08%	0.78	0.6389	0.8841	0.9043	0.4294	1.7%	5.7%	6.5%	10.7%	1.68
13 BMO SelectClass Equity Growth Portfolio Series A	F	0.86%	2.33%	0.34	-0.11%	0.80	0.5007	0.9006	0.8924	0.4948	1.3%	6.4%	5.9%	10.5%	2.71
14 BMO FundSelect Equity Growth Portfolio Series A	F	0.86%	2.35%	0.34	-0.11%	0.80	0.5595	0.9017	0.8792	0.4137	0.4%	5.1%	5.9%	10.5%	2.85
15 Axiom All Equity Portfolio	F	0.88%	2.42%	0.34	-0.13%	0.83	0.5224	0.8831	0.9171	0.4520	1.0%	7.8%	7.3%	10.8%	2.43
16 TD Mgd Max Equity Growth Portfolio	F	0.78%	2.17%	0.33	-0.14%	0.75	0.5676	0.9070	0.9063	0.4480	1.0%	4.1%	5.0%	9.4%	2.44

Financial Information provided by Fundata Canada. (c) Fundata Canada. All Rights Reserved. Past performance does not guarantee future performance. For additional information, your attention is directed to the notes section at the end of this document.

Paterson & Associates - Monthly WRAP Fund Report

May 2018

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
17 CIBC Managed Aggressive Growth Portfolio	F	0.80%	2.26%	0.33	-0.14%	0.78	0.4951	0.8908	0.9110	0.5386	1.8%	5.8%	6.2%	9.7%	2.48
18 BMO Equity Growth ETF Portfolio Fund	F	0.81%	2.39%	0.32	-0.14%	0.78	0.6349	0.8468	0.8590	0.3574	0.8%	5.5%	5.6%	9.8%	1.78
19 CI Portfolio Series Maximum Growth Fund Class A	F	0.72%	2.13%	0.31	-0.11%	0.69	0.6490	0.8505	0.8373	0.3113	0.2%	2.5%	4.2%	8.8%	2.43
20 Desjardins Chorus II Maximum Growth Fund	F	0.66%	1.99%	0.30	-0.14%	0.82	0.6138	0.8206	0.8940	0.5133	0.1%	4.2%	4.9%	7.9%	2.27
21 AGF Elements Global Portfolio	F	0.83%	2.61%	0.30	-0.28%	0.92	0.3993	0.9351	0.9120	0.4373	-0.5%	4.3%	6.4%	10.1%	2.53
22 Desjardins Chorus II Maximum Growth Corp. Class	F	0.62%	1.98%	0.29	-0.13%	0.78	0.6806	0.7923	0.8597	0.4362	0.2%	4.1%	4.9%	7.5%	2.30
23 Franklin Quotential Global Growth Portfolio A	F	0.73%	2.49%	0.27	-0.31%	0.86	0.4880	0.8855	0.9261	0.3970	0.3%	4.2%	2.8%	8.7%	2.58
24 Symmetry Equity Portfolio	F	0.69%	2.40%	0.26	-0.27%	0.79	0.5869	0.8673	0.8434	0.3192	0.1%	2.0%	4.0%	8.2%	2.47
Category Average		0.79%	2.29%	0.32	-0.11%	0.78	0.5779	0.8519	0.8567	0.4001	0.9%	5.4%	5.5%	9.6%	2.42

Paterson & Associates—Monthly WRAP Fund Report

Methodology & Ratings Definitions

May 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%	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

May 2018

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.

This publication does not constitute an offer to sell or the solicitation of an offer to buy any securities. The information provided in this publication is not intended to constitute legal, accounting, financial, tax or investment advice. Many factors unknown to us may affect the applicability of any statement or comment found in this report to your particular circumstances. Those seeking specific investment advice should consider a qualified investment professional.

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.

D.A Paterson & Associates Inc.
701 Rossland Road East, Suite 365
Whitby, Ontario
L1N 9K3
(416) 706-5087
info@paterson-associates.ca
www.paterson-associates.ca