

Global Manager Research Monthly Index Update

Select Benchmark Comparisons as of October 31, 2018



**Wealth
Management**

Period Ending October 31, 2018

	Annualized total returns								Calendar period total returns							Cumulative total returns			
In percentages, based on U.S. dollars	Last month	Trailing 3 mo.	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	2017	2016	2015	2014	2013	2012	2011	3 Yr	5 Yr	7 Yr	10 Yr
Balanced																			
20% MSCI World (Net) 80% Bloomberg Barclays U.S Aggregate1	-2.10	-1.75	-2.27	-1.32	2.46	2.90	3.51	5.31	7.09	3.71	0.42	5.81	3.23	6.60	5.29	7.55	15.38	27.32	67.78
40% MSCI World (Net) 60% Bloomberg Barclays U.S Aggregate1	-3.41	-2.72	-2.21	-0.63	3.85	3.93	5.10	6.61	10.75	4.73	0.22	5.63	8.72	8.96	2.67	12.02	21.28	41.69	89.64
50% MSCI World (Net) 50% Bloomberg Barclays U.S Aggregate1	-4.07	-3.21	-2.20	-0.30	4.55	4.44	5.89	7.23	12.62	5.23	0.08	5.53	11.56	10.13	1.34	14.27	24.24	49.28	100.96
60% MSCI World (Net) 40% Bloomberg Barclays U.S Aggregate1	-4.72	-3.70	-2.19	0.01	5.23	4.93	6.67	7.83	14.52	5.71	-0.07	5.43	14.46	11.29	-0.01	16.53	27.20	57.14	112.50
80% MSCI World (Net) 20% Bloomberg Barclays U.S Aggregate1	-6.03	-4.68	-2.23	0.61	6.58	5.89	8.21	8.97	18.40	6.63	-0.43	5.19	20.44	13.58	-2.75	21.08	33.11	73.69	136.04
Domestic fixed income																			
Bloomberg Barclays US Universal	-0.84	-0.77	-2.23	-1.95	1.59	2.16	2.36	4.51	4.09	3.91	0.43	5.56	-1.35	5.53	7.40	4.84	11.25	17.73	55.45
Bloomberg Barclays US Aggregate	-0.79	-0.79	-2.38	-2.05	1.04	1.83	1.89	3.94	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	3.15	9.52	14.02	47.15
Bloomberg Barclays US Intermediate Aggregate	-0.31	-0.18	-1.17	-1.23	0.86	1.51	1.64	3.47	2.27	1.97	1.21	4.12	-1.02	3.56	5.97	2.60	7.77	12.09	40.59
Bloomberg Barclays US Aggregate Government - Treasury	-0.48	-0.65	-2.14	-1.97	0.20	1.14	1.12	2.64	2.31	1.04	0.84	5.05	-2.75	1.99	9.81	0.59	5.86	8.14	29.76
Bloomberg Barclays US Aggregate Government	-0.47	-0.63	-2.08	-1.92	0.22	1.15	1.12	2.64	2.30	1.05	0.86	4.92	-2.60	2.02	9.02	0.65	5.87	8.11	29.75
Bloomberg Barclays US Government/Credit	-0.87	-0.89	-2.70	-2.31	1.15	1.87	1.95	4.13	4.00	3.05	0.15	6.01	-2.35	4.82	8.74	3.49	9.71	14.50	49.83
Bloomberg Barclays US Intermediate Government/Credit	-0.14	0.05	-0.90	-1.09	0.90	1.36	1.57	3.35	2.14	2.08	1.07	3.13	-0.86	3.89	5.80	2.72	7.01	11.52	39.03
Bloomberg Barclays US Aggregate Credit - Corporate - High Yield	-1.60	-0.32	0.93	0.97	6.60	4.68	6.51	11.20	7.50	17.13	-4.47	2.45	7.44	15.81	4.98	21.13	25.69	55.47	189.01
Bloomberg Barclays US Aggregate Credit	-1.40	-1.23	-3.49	-2.81	2.34	2.81	3.13	6.43	6.18	5.63	-0.77	7.53	-2.01	9.37	8.35	7.17	14.89	24.05	86.42
Bloomberg Barclays US Aggregate Credit - Corp. - Investment Grade	-1.46	-1.33	-3.76	-3.02	2.47	2.94	3.31	6.91	6.42	6.11	-0.68	7.46	-1.53	9.82	8.15	7.59	15.57	25.59	95.01
Bloomberg Barclays Municipal Bond	-0.62	-1.01	-1.01	-0.51	1.90	3.25	3.32	4.80	5.45	0.25	3.30	9.05	-2.55	6.78	10.70	5.79	17.34	25.73	59.76
Bloomberg Barclays Municipal Bond 3 Year	-0.06	-0.50	0.58	-0.16	0.65	0.95	1.21	2.13	1.56	0.08	1.18	1.22	1.33	1.86	3.46	1.96	4.83	8.78	23.44
Bloomberg Barclays Municipal Bond 7 Year	-0.30	-0.81	-0.65	-0.94	1.32	2.39	2.73	4.21	4.49	-0.50	3.26	6.09	-0.97	4.20	10.14	4.02	12.53	20.73	50.98
Bloomberg Barclays Municipal Bond 10 year	-0.58	-0.89	-1.23	-0.93	1.85	3.14	3.40	4.94	5.83	-0.12	3.76	8.72	-2.17	5.70	12.32	5.64	16.73	26.33	61.95
Bloomberg Barclays Municipal Bond 20 Year (17-22 Y)	-0.96	-1.25	-1.69	-0.39	2.59	4.48	4.35	6.04	7.47	0.49	3.93	13.03	-4.42	10.01	13.98	7.98	24.51	34.77	79.81
BofA Merrill Lynch US Treasury Bill (3 M)	0.17	0.51	1.48	1.68	0.90	0.55	0.42	0.35	0.86	0.33	0.05	0.03	0.07	0.11	0.10	2.72	2.79	2.96	3.52
Citigroup (6 M) CD	--	--	--	--	--	--	--	--	0.27	0.27	0.27	0.27	0.27	0.27	0.49	0.39	--	--	--
Citigroup US Inflation-Linked Securities	-1.55	-1.93	-2.52	-1.34	1.51	1.09	0.88	4.17	3.34	4.82	-1.73	4.55	-9.37	7.18	14.01	4.60	5.55	6.34	50.43
BofA ML U.S. Convertible - All Convertibles/All Qualities	-6.05	-2.99	3.75	3.67	8.20	7.51	9.95	12.52	13.70	10.43	-2.99	9.44	24.92	14.96	-5.18	26.67	43.60	94.27	225.36
BofA ML Fixed Rate Preferred Securities	-1.62	-1.74	-1.39	-1.23	4.12	6.41	5.94	8.16	10.58	2.32	7.58	15.44	-3.65	13.59	4.11	12.87	36.44	49.82	119.18
S&P/LSTA U.S. Leveraged Loan 100	-0.20	1.00	3.76	4.17	5.12	3.34	4.34	7.42	3.31	10.88	-2.75	0.99	5.02	10.50	0.63	16.18	17.87	34.61	104.59
Global and International fixed income																			
Bloomberg Barclays Global Aggregate	-1.12	-1.87	-3.46	-2.05	1.52	0.33	0.51	3.16	7.39	2.09	-3.15	0.59	-2.60	4.32	5.64	4.64	1.65	3.63	36.50
Bloomberg Barclays Global Aggregate x US	-1.39	-2.75	-4.38	-2.09	1.82	-0.82	-0.56	2.52	10.51	1.49	-6.02	-3.08	-3.08	4.09	4.36	5.56	-4.04	-3.83	28.30
Bloomberg Barclays Global High Yield	-1.82	-1.50	-2.40	-1.92	5.83	3.95	6.16	11.29	10.43	14.27	-2.72	0.01	7.33	19.60	3.12	18.53	21.39	51.96	191.57
BofA Merrill Lynch Global Broad Market x US	-1.26	-2.77	-4.33	-2.11	1.89	-0.79	-0.52	2.57	10.37	1.69	-6.01	-3.05	-3.02	3.99	4.59	5.77	-3.90	-3.57	28.86
Citigroup WGBI	-1.10	-2.30	-3.62	-2.09	1.32	-0.21	-0.30	2.30	7.49	1.60	-3.57	-0.48	-4.00	1.65	6.35	4.01	-1.04	-2.08	25.59
Citigroup Non-USD WGBI	-1.45	-3.22	-4.50	-2.26	1.86	-0.76	-0.87	2.11	10.33	1.81	-5.54	-2.68	-4.56	1.51	5.17	5.67	-3.73	-5.91	23.19
JP Morgan EMBI Global	-2.23	-2.42	-5.61	-5.27	3.83	3.61	4.41	8.75	9.32	10.19	1.23	5.53	-6.58	18.54	8.46	11.93	19.38	35.29	131.36
Alternatives																			
CPI for all Urban Consumers (CPI-U) ³ **one month lag	0.06	0.45	1.65	2.27	2.00	1.53	1.53	1.42	2.11	2.08	0.66	0.66	1.51	1.76	3.06	6.12	7.90	11.21	15.13
Bloomberg Commodity Index	-2.16	-2.05	-4.14	-1.73	-0.69	-7.31	-7.62	-4.18	1.70	11.77	-24.66	-17.01	-9.52	-1.06	-13.32	-2.06	-31.57	-42.59	-34.73
S&P GSCI	-5.84	-1.09	5.31	11.47	1.05	-10.83	-8.25	-6.74	5.77	11.37	-32.86	-33.06	-1.22	0.08	-1.18	3.17	-43.62	-45.29	-50.26
FTSE NAREIT Equity REITs	-2.97	-2.98	-1.21	1.26	4.55	7.56	9.15	11.28	5.23	8.52	3.20	30.14	2.47	18.06	8.29	14.29	43.97	84.59	191.12
FTSE NAREIT All REITs	-2.62	-2.70	-0.87	1.63	6.11	8.22	9.81	11.72	9.27	9.28	2.29	27.15	3.21	20.14	7.28	19.48	48.41	92.56	202.85
HFRX Global Hedge Fund	-3.11	-3.34	-4.30	-3.53	0.61	0.14	1.19	1.37	5.99	2.50	-3.64	-0.58	6.72	3.51	-8.87	1.85	0.72	8.63	14.57
HFRX Equity Hedge	-3.95	-5.73	-4.81	-2.99	1.21	1.19	2.43	1.46	9.98	0.10	-2.33	1.42	11.14	4.81	-19.08	3.67	6.10	18.27	15.58
HFRX Event Driven	-4.57	-5.08	-9.83	-9.80	1.22	-0.80	1.78	2.29	6.48	11.08	-6.94	-4.06	13.87	5.96	-4.90	3.70	-3.93	13.15	25.35
HFRX Absolute Return	-0.11	-0.10	0.89	0.59	1.21	1.79	1.70	0.08	3.39	0.31	2.86	0.79	3.57	0.88	-3.71	3.66	9.26	12.50	0.76
HFRX Macro/CTA	-2.65	-0.93	-3.80	-3.15	-1.27	-0.19	-0.58	-1.52	2.51	-2.93	-1.96	5.24	-1.79	-1.00	-4.88	-3.76	-0.97	-3.96	-14.20



Period Ending October 31, 2018

Period Ending October 31, 2018	Annualized total returns								Calendar period total returns							Cumulative total returns			
	Last month	Trailing 3 mo.	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	2017	2016	2015	2014	2013	2012	2011	3 Yr	5 Yr	7 Yr	10 Yr
In percentages, based on U.S. dollars																			
Domestic equities																			
Dow Jones Industrial Average	-4.98	-0.64	3.41	9.87	15.25	12.76	13.99	13.33	28.11	16.50	0.21	10.04	29.65	10.24	8.38	53.06	82.33	150.01	249.64
NASDAQ Composite Index	-9.16	-4.52	6.71	9.74	14.37	14.58	16.77	16.87	29.64	8.87	6.96	14.75	40.12	17.45	-0.83	49.61	97.50	195.97	375.31
S&P 500	-6.84	-3.25	3.01	7.35	11.52	11.34	14.03	13.24	21.83	11.96	1.38	13.69	32.39	16.00	2.11	38.70	71.11	150.70	246.68
S&P 500 Growth	-8.08	-2.88	7.77	11.44	13.12	13.55	15.33	15.15	27.44	6.89	5.52	14.89	32.75	14.61	4.65	44.75	88.76	171.34	309.83
S&P 500 Value	-5.33	-3.68	-2.00	3.02	9.46	8.73	12.48	11.09	15.36	17.40	-3.13	12.36	31.99	17.68	-0.48	31.16	52.00	127.73	186.17
S&P Mid Cap 400	-9.55	-7.68	-2.77	1.02	9.85	8.89	12.57	14.13	16.24	20.74	-2.18	9.77	33.50	17.88	-1.73	32.54	53.05	129.04	275.02
S&P Small Cap 600	-10.48	-9.13	2.54	5.60	12.84	10.06	14.32	14.16	13.23	26.56	-1.97	5.76	41.31	16.33	1.02	43.66	61.49	155.15	275.95
S&P 500 Equal Weighted	-7.20	-5.21	-0.45	4.59	10.00	9.89	13.49	14.98	18.90	14.80	-2.20	14.49	36.16	17.65	-0.11	33.09	60.26	142.50	304.03
Value Line Comp Index (Geometric)	-9.33	-8.92	-6.02	-2.54	4.26	2.54	6.60	7.49	11.09	13.54	-11.24	2.69	32.96	11.54	-11.39	13.34	13.34	56.43	105.88
Value Line Comp Index (Arithmetic)	-8.74	-7.64	-2.20	2.20	9.70	7.50	11.80	14.80	15.78	20.72	-6.93	6.93	40.98	15.24	-5.93	32.03	43.55	118.35	297.61
Russell 1000	-7.08	-3.51	2.67	6.98	11.31	11.05	13.94	13.42	21.69	12.05	0.92	13.24	33.11	16.42	1.50	37.93	68.91	149.34	252.38
Russell 1000 Growth	-8.94	-3.43	6.62	10.71	13.67	13.43	15.39	15.45	30.21	7.08	5.67	13.05	33.48	15.26	2.64	46.88	87.80	172.30	320.82
Russell 1000 Value	-5.18	-3.59	-1.46	3.03	8.88	8.61	12.40	11.30	13.66	17.34	-3.83	13.45	32.53	17.51	0.39	29.09	51.13	126.63	191.70
Russell 2000	-10.86	-9.26	-0.60	1.85	10.68	8.01	12.25	12.44	14.65	21.31	-4.41	4.89	38.82	16.35	-4.18	35.57	47.00	124.54	222.86
Russell 2000 Growth	-12.65	-9.39	1.11	4.13	10.72	8.75	12.87	13.89	22.17	11.32	-1.38	5.60	43.30	14.59	-2.91	35.74	52.13	133.38	267.24
Russell 2000 Value	-8.95	-9.10	-2.46	-0.59	10.52	7.18	11.56	10.95	7.84	31.74	-7.47	4.22	34.52	18.05	-5.50	35.00	41.47	115.11	182.57
Russell 2500	-10.15	-7.72	-0.80	2.80	10.05	8.32	12.51	13.55	16.81	17.59	-2.90	7.07	36.80	17.88	-2.51	33.28	49.11	128.15	256.44
Russell 2500 Growth	-12.01	-7.44	1.87	5.52	11.13	9.53	13.24	15.06	24.46	9.73	-0.19	7.05	40.65	16.13	-1.57	37.24	57.61	138.74	306.68
Russell 2500 Value	-8.55	-7.93	-3.29	0.27	9.04	7.17	11.77	12.11	10.36	25.20	-5.49	7.11	33.32	19.21	-3.36	29.65	41.40	117.87	213.55
Russell 3000	-7.36	-3.95	2.43	6.60	11.27	10.81	13.81	13.35	21.13	12.74	0.48	12.56	33.55	16.42	1.03	37.76	67.08	147.30	250.02
Russell 3000 Growth	-9.23	-3.90	6.19	10.20	13.45	13.06	15.19	15.33	29.59	7.39	5.09	12.44	34.23	15.21	2.18	46.01	84.76	169.07	316.45
Russell 3000 Value	-5.46	-4.00	-1.52	2.78	9.02	8.50	12.33	11.27	13.19	18.40	-4.13	12.70	32.69	17.55	-0.10	29.56	50.35	125.70	191.03
Russell Midcap	-8.31	-6.07	-1.47	2.79	9.04	8.97	12.67	14.19	18.52	13.80	-2.44	13.22	34.76	17.28	-1.55	29.66	53.67	130.56	277.08
Russell Midcap Growth	-9.90	-5.11	2.16	6.14	10.39	10.10	13.08	15.10	25.27	7.33	-0.20	11.90	35.74	15.81	-1.65	34.54	61.77	136.36	308.01
Russell Midcap Value	-7.20	-6.68	-4.30	0.16	8.15	8.11	12.39	13.35	13.34	20.00	-4.78	14.75	33.46	18.51	-1.38	26.50	47.66	126.58	250.10
Russell Top 200	-6.60	-2.51	4.32	8.64	12.20	11.90	14.44	13.13	22.96	11.33	2.36	13.25	32.41	16.04	2.83	41.26	75.42	157.07	243.46
Russell Microcap	-10.90	-10.10	-0.54	1.42	10.08	7.62	12.86	12.09	13.17	20.37	-5.16	3.65	45.62	19.75	-9.27	33.37	44.34	133.25	212.95
Global and international equities																			
MSCI The World Index ²	-7.34	-5.67	-2.31	1.16	7.91	6.81	9.71	10.02	22.40	7.51	-0.87	4.94	26.68	15.83	-5.54	25.67	38.98	91.31	159.91
MSCI The World Index Growth ²	-9.26	-6.38	0.08	3.64	8.99	8.51	10.83	11.33	28.01	2.80	3.11	6.14	26.73	16.12	-5.49	29.46	50.44	105.35	192.57
MSCI The World Index Value ²	-5.30	-4.94	-4.80	-1.43	6.77	5.05	8.54	8.66	17.10	12.33	-4.82	3.69	26.62	15.51	-5.62	21.72	27.90	77.48	129.45
MSCI World High Dividend Yield ²	-4.58	-3.58	-3.38	-0.35	6.60	4.79	7.81	9.02	18.14	9.29	-3.20	2.48	21.91	12.24	3.89	21.13	26.38	69.30	137.15
MSCI AC World Index ²	-7.49	-6.36	-3.96	-0.52	7.74	6.15	8.79	9.75	23.97	7.86	-2.36	4.16	22.80	16.13	-7.35	25.08	34.75	80.32	153.44
MSCI AC World Index ex USA ²	-8.13	-9.65	-10.97	-8.24	4.37	1.63	4.45	6.92	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	13.70	8.44	35.63	95.28
MSCI AC World Index ex USA Growth ²	-9.36	-11.12	-11.66	-8.76	4.45	2.62	5.11	7.41	32.01	0.12	-1.25	-2.65	15.49	16.67	-14.21	13.97	13.79	41.71	104.35
MSCI AC World Index ex USA Value ²	-6.87	-8.12	-10.28	-7.73	4.25	0.61	3.75	6.39	22.66	8.92	-10.06	-5.10	15.04	16.97	-13.20	13.31	3.07	29.38	85.77
MSCI EAFE ²	-7.96	-8.95	-9.28	-6.85	3.62	2.02	5.63	6.89	25.03	1.00	-0.81	-4.90	22.78	17.32	-12.14	11.27	10.52	46.70	94.73
MSCI EAFE Growth ²	-9.21	-9.69	-8.68	-6.04	3.98	3.07	6.30	7.53	28.86	-3.04	4.09	-4.43	22.55	16.86	-12.11	12.42	16.35	53.39	106.60
MSCI EAFE Value ²	-6.64	-8.18	-9.90	-7.69	3.20	0.91	4.89	6.19	21.44	5.02	-5.68	-5.39	22.95	17.69	-12.17	9.91	4.63	39.64	82.35
MSCI EMF (Emerging Markets) ²	-8.71	-11.65	-15.72	-12.52	6.52	0.78	1.85	7.84	37.28	11.19	-14.92	-2.19	-2.60	18.22	-18.42	20.88	3.97	13.68	112.73
S&P ADR Index ²	-6.30	-8.08	-7.48	-4.91	4.36	1.41	4.40	6.20	22.05	6.34	-8.78	-4.26	15.52	16.11	-10.58	13.65	7.26	35.20	82.54
Canadian indices																			
In percentages, based on canadian dollars																			
S&P/TSX COMPOSITE INDEX	-6.27	-7.87	-5.00	-3.41	6.67	5.44	6.08	7.56	9.10	21.08	-8.32	10.55	12.99	7.19	-8.71	21.37	30.31	51.12	107.18
FTSE TMX Canada Universe Bond	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
60.40 S&P - FTSE TMX Blend	-4.01	-5.08	-3.62	-2.50	4.54	4.45	4.84	6.45	6.46	13.00	-3.63	9.92	7.17	5.89	-1.48	14.23	24.30	39.19	86.87

Sources: Factset

1. Allocations between indices are rebalanced to the indices' target weightings at the beginning of each month.

2. Morgan Stanley Capital International (MSCI) indices are calculated assuming the maximum possible dividend reinvestment (With Net Dividends). The amounts reinvested represent the dividends distributed to investors residing in the home countries of component companies.

3. The Consumer Price Index represents the index performance on a one month lag.

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