
Cliffwater Hedge Fund Focus List *

Five Year Return and Risk Analysis by Hedge Fund Strategy

Performance Data through December 31, 2021

Prepared February 28, 2021

* Approximately 500 hedge funds rated A or B by Cliffwater

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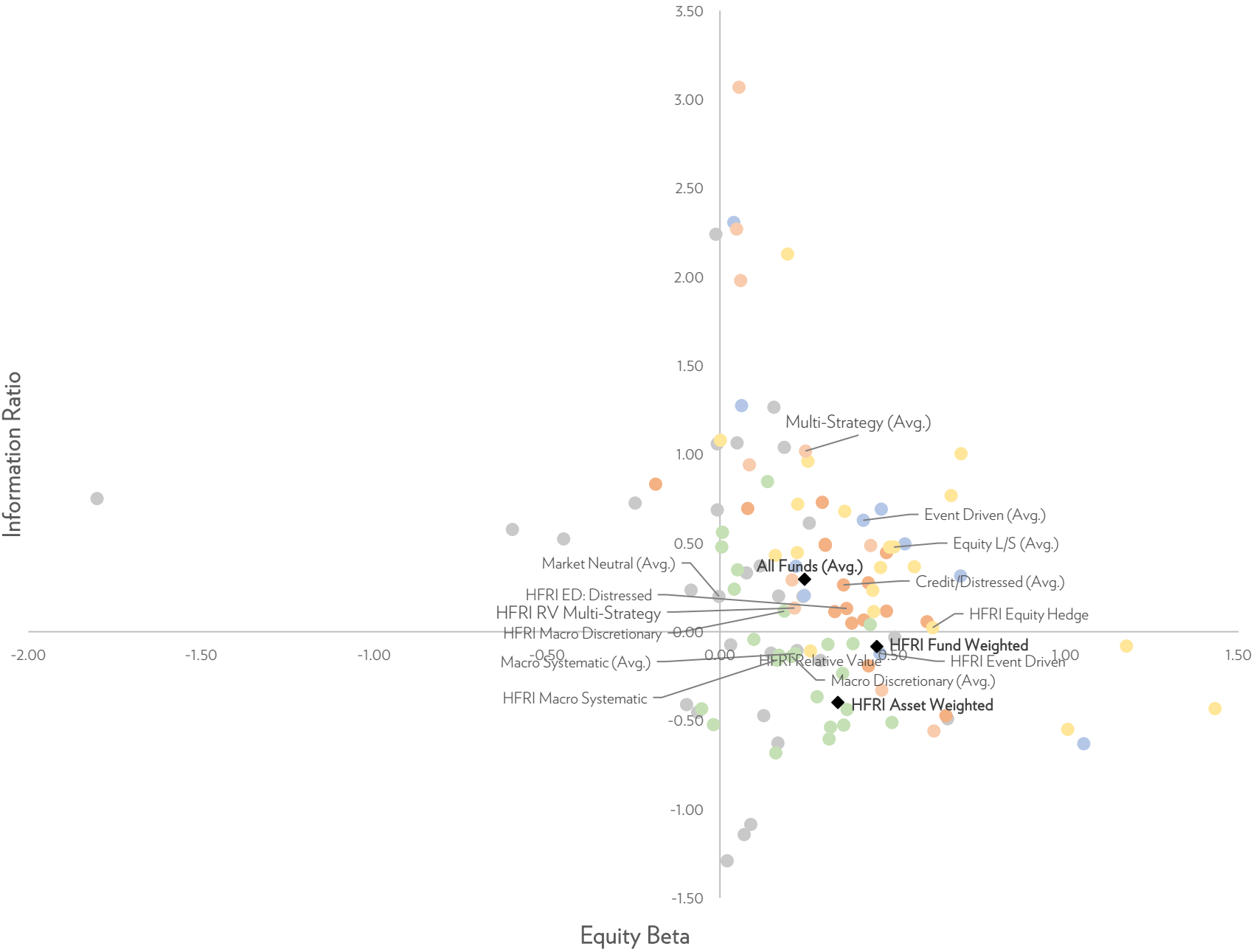
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights					
5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank	
36 South Kohinoor Core Fund	-5.88%	40.65%	-0.03	81	-1.80	-23.22%	-26.86%	22.91%	30.51%	33.65	0.75	19	1.0%	-5.8%	-6.8%	-46.69%	0.50	0.43%	47.12%	1	
36 South Kohinoor Series Three Fund	-1.24%	14.09%	-0.12	85	-0.60	-7.73%	-8.94%	6.27%	10.88%	11.55	0.58	28	1.0%	-2.0%	-3.0%	-16.42%	0.50	1.01%	17.43%	2	
Aeolus Property Catastrophe Keystone PF Fund LP	-7.00%	14.85%	-0.49	90	-0.10	-1.24%	-1.44%	-6.06%	14.78%	0.70	-0.41	76	1.0%	0.0%	-1.0%	-0.14%	0.60	8.80%	8.93%	5	
Aeolus Property Catastrophe Spire PF Fund LP	-2.79%	6.83%	-0.58	93	-0.06	-0.83%	-0.96%	-3.07%	6.76%	0.48	-0.45	80	1.0%	-0.2%	-1.2%	-1.32%	0.65	4.60%	5.91%	11	
Alphadyne International Fund Ltd.	6.33%	7.60%	0.67	42	-0.01	-0.10%	-0.12%	5.22%	7.60%	4.77	0.69	25	1.0%	-0.1%	-1.1%	-0.78%	0.65	5.63%	6.41%	9	
AQR Liquid Enhanced Alternative Premia Fund, L.P.	-2.92%	11.47%	-0.32	88	0.13	1.63%	1.89%	-5.35%	11.31%	-6.04	-0.47	82	1.0%	0.6%	-0.4%	4.91%	0.65	9.21%	4.30%	14	
Aristeia Partners, LP.	9.46%	5.14%	1.53	7	0.16	2.01%	2.33%	5.80%	4.59%	0.13	1.26	8	1.0%	0.7%	-0.3%	5.58%	0.60	4.86%	-0.72%	46	
BIL, Ltd.	4.39%	4.91%	0.63	46	0.17	2.19%	2.53%	0.85%	4.20%	-4.40	0.20	53	1.0%	0.8%	-0.2%	6.31%	0.70	5.17%	-1.14%	50	
Capula Global Relative Value Fund Ltd.	4.81%	1.60%	2.12	5	-0.01	-0.16%	-0.18%	3.56%	1.59%	0.64	2.24	4	1.0%	-0.1%	-1.1%	-0.42%	0.70	1.77%	2.19%	29	
Capula Tail Risk Fund	-2.08%	8.78%	-0.35	89	-0.45	-5.83%	-6.74%	2.94%	5.63%	5.05	0.52	30	1.0%	-1.6%	-2.6%	-12.91%	0.55	-0.06%	12.85%	3	
Capula Volatility Opportunities Trust	1.49%	6.15%	0.05	80	-0.25	-3.16%	-3.66%	3.59%	4.95%	3.94	0.73	21	1.0%	-0.8%	-1.8%	-6.68%	0.60	1.61%	8.28%	6	
CFM Institutional Systematic Diversified Fund LP	-0.77%	6.97%	-0.27	87	0.17	2.16%	2.49%	-4.08%	6.51%	-4.56	-0.63	91	1.0%	0.8%	-0.2%	6.28%	0.60	6.11%	-0.17%	45	
DE Shaw Orienteer Fund, L.L.C.	5.70%	12.38%	0.41	61	0.66	8.48%	9.81%	-3.70%	7.55%	-7.62	-0.49	83	1.0%	2.3%	1.3%	18.36%	0.60	10.98%	-7.38%	90	
Iguazu Partners, L.P.	8.26%	6.79%	1.01	24	0.26	3.33%	3.85%	3.42%	5.60%	-0.88	0.61	27	1.0%	0.9%	-0.1%	7.37%	0.65	6.63%	-0.74%	48	
Juniper Catastrophe Fund L.P.	-6.11%	7.93%	-0.92	94	0.09	1.15%	1.33%	-8.49%	7.82%	-1.26	-1.09	94	1.0%	0.2%	-0.8%	1.75%	0.60	6.23%	4.48%	13	
Laurion Capital, LP	13.17%	11.15%	1.05	21	-0.01	-0.10%	-0.11%	11.80%	11.15%	8.11	1.06	11	1.0%	0.2%	-0.8%	1.97%	0.70	8.50%	6.53%	8	
Lazard Rathmore Fund, Ltd.	8.04%	4.80%	1.36	9	0.19	2.39%	2.77%	4.07%	3.92%	-1.10	1.04	12	1.0%	0.8%	-0.2%	6.46%	0.70	5.11%	-1.35%	52	
LMR Fund Limited	7.10%	12.27%	0.52	52	0.51	6.52%	7.54%	-0.31%	9.68%	-8.87	-0.03	62	1.0%	2.1%	1.1%	17.36%	0.70	11.91%	-5.45%	81	
Magdalena Partners, L.P.	5.97%	9.29%	0.53	51	0.24	3.09%	3.58%	1.70%	8.57%	1.81	0.20	54	1.0%	0.8%	-0.2%	6.88%	0.60	7.98%	1.10%	39	
Nephila Catastrophe Fund L.P.	-2.67%	3.31%	-1.20	96	0.02	0.27%	0.31%	-4.26%	3.30%	-0.54	-1.29	96	1.0%	0.0%	-1.0%	0.15%	0.65	3.08%	2.93%	23	
Palmetto Catastrophe Fund L.P.	-3.23%	4.86%	-0.92	95	0.07	0.91%	1.05%	-5.43%	4.75%	0.16	-1.14	95	1.0%	0.3%	-0.7%	2.21%	0.65	4.45%	2.25%	28	
Renaissance Institutional Diversified Global Equities Onshore	0.26%	11.34%	-0.04	82	0.03	0.40%	0.46%	-0.84%	11.33%	-9.35	-0.07	66	1.0%	0.2%	-0.8%	1.52%	0.60	7.83%	6.30%	10	
Rokos Global Macro Fund LP	2.55%	14.33%	0.16	74	-0.08	-1.08%	-1.25%	3.34%	14.27%	9.62	0.23	50	1.0%	-0.4%	-1.4%	-3.44%	0.65	9.31%	12.75%	4	
Two Sigma Absolute Return Enhanced Fund, LP	5.60%	8.04%	0.55	50	0.12	1.50%	1.73%	2.91%	7.85%	-1.29	0.37	40	1.0%	0.4%	-0.6%	3.08%	0.75	7.65%	4.57%	12	
Two Sigma Absolute Return Fund, LP	4.01%	5.35%	0.51	54	0.08	0.99%	1.14%	1.73%	5.23%	-0.78	0.33	45	1.0%	0.2%	-0.8%	1.99%	0.75	5.34%	3.35%	19	
Two Sigma Risk Premia Cayman Fund, Ltd.	2.52%	5.72%	0.23	69	0.15	1.90%	2.20%	-0.63%	5.29%	-2.79	-0.12	70	1.0%	0.5%	-0.5%	3.78%	0.65	5.47%	1.69%	34	
Two Sigma Risk Premia Enhanced Fund, LP	3.13%	8.65%	0.25	68	0.22	2.87%	3.32%	-0.84%	7.98%	-4.25	-0.11	68	1.0%	0.7%	-0.3%	5.78%	0.65	7.88%	2.10%	30	
Two Sigma Spectrum U.S. Fund, LP	5.91%	3.67%	1.22	12	0.05	0.64%	0.74%	3.83%	3.60%	0.81	1.06	10	1.0%	0.2%	-0.8%	1.39%	0.75	3.89%	2.49%	26	
Market Neutral Average	2.29%	9.25%	0.27		0.00	-0.04%	-0.04%	1.46%	8.11%	0.99	0.20								No. Funds	28	
HFRI Relative Value (Total) Index	4.58%	5.51%	0.86		0.29	3.75%	4.33%	-0.55%	3.41%	-3.18	-0.16										
Beach Point Total Return Fund II LP	5.54%	8.98%	0.50	55	0.43	5.54%	6.41%	-1.21%	6.29%	-5.93	-0.19	72	1.0%	1.7%	0.7%	13.73%	0.60	8.25%	-5.48%	82	
Brigade Leveraged Capital Structures Fund LP	8.99%	10.05%	0.78	35	0.43	5.53%	6.40%	2.14%	7.75%	-7.14	0.28	48	1.0%	1.7%	0.7%	14.17%	0.60	9.12%	-5.05%	77	
Canyon Value Realization Fund, L.P.	5.37%	12.72%	0.38	64	0.65	8.42%	9.74%	-3.87%	8.18%	-7.77	-0.47	81	1.0%	2.5%	1.5%	19.86%	0.60	11.32%	-8.54%	92	
Centerbridge Credit Partners, L.P.	6.29%	7.80%	0.65	44	0.33	4.28%	4.95%	0.69%	6.03%	-4.92	0.11	56	1.0%	1.3%	0.3%	10.70%	0.65	7.55%	-3.15%	68	
GCA Credit Opportunities Fund, LLC	3.57%	2.04%	1.09	17	0.08	1.03%	1.19%	1.15%	1.65%	-0.16	0.69	23	1.0%	0.3%	-0.7%	2.17%	0.60	2.44%	0.28%	43	
King Street Capital, LP.	6.55%	7.30%	0.72	38	0.38	4.91%	5.68%	0.22%	4.58%	0.31	0.05	60	1.0%	1.3%	0.3%	10.91%	0.80	7.72%	-3.19%	69	
Napier Park Select Fund, LP	8.34%	10.81%	0.68	41	0.48	6.21%	7.18%	0.94%	8.09%	-6.32	0.12	55	1.0%	2.0%	1.0%	16.14%	0.55	9.37%	-6.76%	87	
OWS Credit Opportunity Fund, L.P.	8.68%	8.15%	0.91	30	0.30	3.92%	4.54%	3.34%	6.77%	-7.19	0.49	32	1.0%	1.3%	0.3%	10.91%	0.70	8.13%	-2.78%	65	
OWS Credit Opportunity Offshore Fund, Ltd.	8.64%	8.15%	0.90	31	0.30	3.93%	4.55%	3.30%	6.77%	-7.18	0.49	33	1.0%	1.4%	0.4%	10.94%	0.70	8.14%	-2.80%	66	
PIMCO Global Credit Opportunity Onshore Fund LLC	4.56%	7.61%	0.45	59	-0.19	-2.40%	-2.78%	5.89%	7.09%	2.00	0.83	17	1.0%	-0.3%	-1.3%	-2.79%	0.65	3.76%	6.54%	7	
Redwood Offshore Fund, Ltd.	9.41%	10.93%	0.76	36	0.60	7.72%	8.93%	0.36%	6.30%	-2.76	0.06	59	1.0%	2.2%	1.2%	17.75%	0.65	10.04%	-7.71%	91	
Redwood Opportunity Offshore Fund, Ltd.	10.66%	9.76%	0.96	27	0.48	6.21%	7.18%	2.95%	6.62%	-5.24	0.45	37	1.0%	1.9%	0.9%	15.65%	0.60	8.90%	-6.76%	86	
Sculptor Credit Opportunities Domestic Partners, L.P.	6.99%	11.05%	0.55	49	0.42	5.36%	6.20%	0.60%	9.14%	-8.59	0.07	58	1.0%	1.9%	0.9%	15.54%	0.65	10.30%	-5.24%	79	
Silver Point Capital Offshore Fund, Ltd.	9.52%	7.18%	1.12	15	0.30	3.81%	4.41%	4.13%	5.66%	-3.03	0.73	20	1.0%	1.2%	0.2%	9.54%	0.60	6.72%	-2.82%	67	
Credit/Distressed Average	7.37%	8.75%	0.75		0.36	4.61%	5.33%	1.47%	6.49%	-4.57	0.26								No. Funds	14	
HFRI ED: Distressed/Restructuring Index	6.81%	7.64%	0.93		0.37	4.72%	5.46%	0.70%	5.34%	-2.29	0.13										
Cevian Capital II, LP	8.08%	18.21%	0.45	60	1.05	13.56%	15.68%	-5.85%	9.26%	-1.24	-0.63	92	1.0%	3.1%	2.1%	25.36%	0.65	15.88%	-9.48%	93	
Davidson Kempner International, Ltd.	5.28%	5.03%	0.79	34	0.24	3.15%	3.64%	0.71%	3.47%	-2.72	0.20	52	1.0%	1.0%	0.0%	8.22%	0.75	5.47%	-2.75%	64	
Elliott International Limited	8.56%	2.85%	2.44	2	0.04	0.52%	0.60%	6.42%	2.78%	0.37	2.31	2	1.0%	0.2%	-0.8%	1.50%	0.80	3.33%	1.83%	33	
PSquared US Feeder Fund, LP	9.01%	5.29%	1.41	8	0.06	0.81%	0.93%	6.63%	5.20%	0.68	1.27	7	1.0%	0.2%	-0.8%	1.27%	0.70	4.94%	3.67%	15	
Senator Global Opportunity Fund LP	11.31%	9.76%	1.01	23	0.53	6.89%	7.97%	2.79%	5.64%	2.10	0.49	31	1.0%	1.9%	0.9%	15.36%	0.70	9.33%	-6.02%	84	

CW Select List - Dec 2021

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights					
5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied	Rank	
Starboard Value and Opportunity Fund LP	12.17%	9.47%	1.12	14	0.47	6.01%	6.95%	4.44%	6.43%	-0.05	0.69	24	1.0%	1.4%	0.4%	11.43%	0.65	8.98%	-2.45%	62	
Taconic Opportunity Fund L.P.	5.73%	5.15%	0.85	33	0.22	2.83%	3.28%	1.47%	3.98%	-2.71	0.37	41	1.0%	0.9%	-0.1%	7.49%	0.70	5.45%	-2.04%	60	
Third Point Partners Qualified L.P.	12.83%	12.80%	0.91	29	0.70	8.97%	10.37%	2.36%	7.50%	-1.54	0.31	46	1.0%	2.3%	1.3%	18.92%	0.65	11.66%	-7.26%	89	
Event Driven Average	9.12%	8.57%	1.12		0.41	5.34%	6.18%	2.37%	5.53%	-0.64	0.63										
HFRI Event-Driven (Total) Index	6.81%	8.15%	0.88		0.46	5.96%	6.89%	-0.53%	4.36%	-2.30	-0.12										
																			No. Funds	8	
37 Capital bluescale Fund, LP	3.01%	11.51%	0.20	71	0.26	3.37%	3.90%	-1.18%	10.83%	0.85	-0.11	69	1.0%	1.2%	0.2%	9.91%	0.65	10.06%	0.15%	44	
Archipelago Partners, L.P.	8.18%	7.85%	0.87	32	0.44	5.70%	6.59%	0.99%	4.27%	-1.34	0.23	51	1.0%	1.5%	0.5%	12.21%	0.65	7.36%	-4.86%	75	
Bay Pond Partners, L.P.	14.20%	22.08%	0.66	43	1.18	15.15%	17.52%	-1.09%	13.44%	-4.07	-0.08	67	1.0%	4.6%	3.6%	36.98%	0.65	19.66%	-17.31%	96	
Cadian Fund LP	12.97%	19.96%	0.65	45	0.46	5.98%	6.92%	6.78%	18.72%	6.30	0.36	43	1.0%	2.0%	1.0%	15.98%	0.65	16.94%	0.96%	40	
Egerton Long/Short (USD) Fund Limited	11.09%	10.48%	0.93	28	0.56	7.24%	8.38%	2.31%	6.30%	-2.75	0.37	42	1.0%	1.9%	0.9%	15.42%	0.70	10.03%	-5.39%	80	
Glenview Institutional Partners, L.P.	11.30%	25.82%	0.49	56	1.43	18.46%	21.35%	-6.29%	14.52%	0.08	-0.43	77	1.0%	4.5%	3.5%	36.21%	0.65	22.58%	-13.63%	95	
Junto Capital Partners LP	9.82%	3.91%	2.08	6	0.20	2.52%	2.92%	5.55%	2.61%	0.34	2.13	5	1.0%	0.6%	-0.4%	4.88%	0.60	4.02%	-0.86%	49	
Lakewood Capital Partners, LP	7.14%	18.56%	0.40	63	1.01	12.96%	14.99%	-6.02%	10.94%	-3.49	-0.55	88	1.0%	3.4%	2.4%	27.29%	0.65	16.57%	-10.73%	94	
Marshall Wace - MW Eureka (US) Fund	9.37%	5.99%	1.31	11	0.25	3.28%	3.79%	4.46%	4.64%	-1.10	0.96	14	1.0%	1.1%	0.1%	8.73%	0.75	6.44%	-2.28%	61	
Marshall Wace - MW Global Opportunities (US) Fund	6.52%	7.75%	0.68	40	0.16	2.07%	2.39%	3.17%	7.37%	2.92	0.43	39	1.0%	0.7%	-0.3%	5.70%	0.70	7.31%	1.61%	35	
Marshall Wace - MW TOPS (US) Fund	7.70%	5.66%	1.11	16	0.23	2.90%	3.35%	3.28%	4.56%	-0.64	0.72	22	1.0%	0.9%	-0.1%	7.55%	0.65	5.67%	-1.88%	58	
Marshall Wace - MW Japan Market Neutral Fund	4.62%	2.98%	1.08	18	0.00	0.02%	0.02%	3.22%	2.98%	-0.74	1.08	9	1.0%	0.0%	-1.0%	-0.08%	0.75	3.01%	3.09%	21	
Renaissance Institutional Equities Fund LLC	7.95%	12.71%	0.56	48	0.44	5.74%	6.63%	1.23%	10.84%	-6.06	0.11	57	1.0%	1.3%	0.3%	10.82%	0.60	11.12%	0.29%	42	
Samlyn Onshore Fund, L.P.	10.66%	9.33%	0.99	26	0.49	6.32%	7.31%	2.76%	5.80%	-1.32	0.48	36	1.0%	1.9%	0.9%	15.19%	0.70	9.06%	-6.13%	85	
Tiger Global L.P.	21.28%	17.12%	1.14	13	0.67	8.62%	9.97%	10.68%	13.92%	-0.19	0.77	18	1.0%	2.6%	1.6%	20.67%	0.70	16.29%	-4.38%	73	
Tiger Global, Ltd.	24.05%	16.18%	1.34	10	0.70	8.99%	10.39%	12.45%	12.41%	-0.25	1.00	13	1.0%	2.6%	1.6%	21.02%	0.70	15.47%	-5.55%	83	
Turiya Fund LP	8.88%	11.42%	0.69	39	0.22	2.88%	3.33%	4.86%	10.92%	-1.17	0.45	38	1.0%	0.8%	-0.2%	6.32%	0.65	9.79%	3.47%	17	
Viking Global Equities III, Ltd	11.18%	9.02%	1.08	19	0.36	4.65%	5.38%	4.92%	7.24%	3.10	0.68	26	1.0%	1.3%	0.3%	10.73%	0.70	8.95%	-1.78%	57	
Equity Long/Short Average	10.55%	12.13%	0.90		0.50	6.49%	7.51%	2.89%	9.02%	-0.53	0.48										
HFRI Equity Hedge (Total) Index	9.51%	9.76%	1.02		0.62	7.94%	9.18%	0.08%	3.32%	-0.54	0.02								No. Funds	18	
Bridgewater Pure Alpha Major Markets, LLC	2.26%	8.21%	0.15	75	0.17	2.21%	2.55%	-1.04%	7.81%	1.80	-0.13	71	1.0%	0.6%	-0.4%	5.00%	0.65	7.31%	2.31%	27	
Bridgewater Pure Alpha Trading Company Ltd.	1.78%	8.95%	0.09	77	0.28	3.62%	4.19%	-2.90%	7.91%	-2.08	-0.37	75	1.0%	1.2%	0.2%	9.45%	0.70	8.73%	-0.72%	47	
Caxton Global Investments Limited	9.99%	8.22%	1.04	22	0.14	1.78%	2.06%	6.72%	7.95%	6.27	0.85	16	1.0%	0.7%	-0.3%	5.90%	0.65	7.12%	1.22%	37	
Eisler Capital Fund LP	3.25%	3.27%	0.59	47	0.01	0.09%	0.10%	1.83%	3.26%	1.85	0.56	29	1.0%	0.0%	-1.0%	0.20%	0.60	2.78%	2.58%	25	
EMSO Saguaro Ltd.	2.50%	6.64%	0.21	70	0.32	4.07%	4.71%	-2.83%	4.68%	-1.67	-0.60	90	1.0%	1.2%	0.2%	9.80%	0.55	6.07%	-3.73%	72	
Graham Absolute Return Trading Ltd.	1.84%	9.06%	0.10	76	0.36	4.62%	5.34%	-3.85%	7.32%	-3.63	-0.53	86	1.0%	1.6%	0.6%	13.00%	0.65	8.61%	-4.39%	74	
Graham - Absolute Return TT Capped Beta SP	-4.79%	11.31%	-0.50	91	-0.05	-0.68%	-0.79%	-4.90%	11.28%	2.78	-0.43	78	1.0%	0.4%	-0.6%	3.61%	0.55	6.50%	2.89%	24	
Graham - Discretionary Enhanced Vol Segregated Portfolio	0.43%	9.90%	-0.04	83	0.32	4.12%	4.77%	-4.66%	8.67%	-3.00	-0.54	87	1.0%	1.6%	0.6%	12.82%	0.65	9.16%	-3.65%	70	
Graham - Discretionary Segregated Portfolio	0.39%	4.97%	-0.16	86	0.16	2.08%	2.41%	-2.97%	4.34%	-1.49	-0.68	93	1.0%	0.8%	-0.2%	6.40%	0.65	4.98%	-1.42%	53	
MKP Opportunity Partners, LP	2.97%	4.89%	0.35	65	0.04	0.53%	0.62%	1.17%	4.85%	-0.33	0.24	49	1.0%	0.4%	-0.6%	2.89%	0.65	4.27%	1.38%	36	
Pharo Gaia Fund, Ltd.	6.99%	11.91%	0.52	53	0.43	5.60%	6.48%	0.40%	10.00%	-2.09	0.04	61	1.0%	1.7%	0.7%	14.06%	0.70	11.52%	-2.55%	63	
Pharo Macro Fund, Ltd.	4.64%	8.86%	0.41	62	0.31	4.03%	4.66%	-0.54%	7.53%	-0.96	-0.07	65	1.0%	1.3%	0.3%	10.34%	0.75	9.11%	-1.23%	51	
Macro Discretionary Average	2.69%	8.01%	0.23		0.21	2.67%	3.09%	-1.13%	7.13%	-0.21	-0.14										
HFRI Macro: Discretionary Thematic Index	4.21%	4.72%	0.92		0.19	2.40%	2.77%	0.44%	3.82%	2.16	0.12								No. Funds	12	
AHL Alpha (Cayman) Limited	5.10%	8.20%	0.49	57	0.01	0.07%	0.08%	3.92%	8.20%	2.85	0.48	35	1.0%	0.3%	-0.7%	2.27%	0.60	5.73%	3.46%	18	
Aspect Core Trend HV Fund, Ltd.	1.23%	13.08%	0.06	79	0.10	1.26%	1.46%	-0.56%	13.00%	0.79	-0.04	63	1.0%	0.7%	-0.3%	5.80%	0.55	8.76%	2.96%	22	
Crabel Gemini 1X	4.12%	6.48%	0.45	58	0.05	0.65%	0.76%	2.25%	6.44%	2.04	0.35	44	1.0%	0.2%	-0.8%	1.53%	0.60	5.06%	3.53%	16	
Graham - K4D-10V Segregated Portfolio	1.67%	10.64%	0.08	78	0.37	4.74%	5.48%	-4.00%	9.12%	-1.73	-0.44	79	1.0%	1.3%	0.3%	10.93%	0.60	9.41%	-1.52%	55	
Graham - Proprietary Matrix Segregated Portfolio	2.80%	11.54%	0.18	73	0.50	6.41%	7.42%	-4.52%	8.84%	-3.69	-0.51	84	1.0%	2.2%	1.2%	17.96%	0.65	10.81%	-7.15%	88	
Graham - Tactical Trend Capped Beta (Equities) Segregated	-5.40%	11.44%	-0.54	92	-0.02	-0.24%	-0.28%	-5.98%	11.44%	2.37	-0.52	85	1.0%	0.5%	-0.5%	4.13%	0.60	7.46%	3.32%	20	
Graham - Tactical Trend Segregated Portfolio	2.85%	11.99%	0.18	72	0.35	4.57%	5.29%	-2.53%	10.76%	-0.88	-0.24	73	1.0%	1.5%	0.5%	12.23%	0.60	10.28%	-1.95%	59	
Lynx (Bermuda) Ltd.	4.47%	15.11%	0.28	66	0.38	4.96%	5.73%	-0.93%	13.98%	0.48	-0.07	64	1.0%	1.8%	0.8%	14.83%	0.65	13.17%	-1.65%	56	
Macro Systematic Average	2.10%	11.06%	0.15		0.22	2.80%	3.24%	-1.54%	10.22%	0.28	-0.12										
HFRI Macro: Systematic Diversified Index	2.20%	7.21%	0.34		0.16	2.13%	2.46%	-1.08%	6.78%	0.35	-0.16								No. Funds	8	

CW Select List - Dec 2021

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights				
5 Years ending December 31, 2021		Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank
Alyeska Fund, L.P.		11.20%	9.24%	1.05	20	0.08	1.09%	1.26%	8.62%	9.16%	-1.16	0.94	15	1.0%	0.8%	-0.2%	6.33%	0.65	7.45%	1.12%	38
CQS Directional Opportunities Feeder Fund, LP		-1.88%	19.02%	-0.06	84	0.62	7.98%	9.22%	-9.31%	16.63%	-17.33	-0.56	89	1.0%	2.7%	1.7%	22.26%	0.75	18.58%	-3.68%	71
CQS Diversified Fund Alpha II		3.81%	11.59%	0.27	67	0.47	6.03%	6.98%	-3.04%	9.25%	-9.23	-0.33	74	1.0%	2.0%	1.0%	16.51%	0.70	11.28%	-5.23%	78
DE Shaw Composite International Fund		13.97%	3.73%	3.19	1	0.05	0.71%	0.82%	11.16%	3.64%	1.20	3.07	1	1.0%	0.3%	-0.7%	2.43%	0.85	4.33%	1.90%	31
DE Shaw Multi-Asset Fund, L.L.C.		7.05%	2.55%	2.17	4	0.06	0.77%	0.89%	4.74%	2.39%	0.05	1.98	6	1.0%	0.3%	-0.7%	2.36%	0.80	3.19%	0.83%	41
HBK Multi-Strategy Offshore Fund Ltd.		5.39%	5.45%	0.75	37	0.21	2.69%	3.11%	1.31%	4.48%	-2.13	0.29	47	1.0%	0.9%	-0.1%	6.95%	0.65	5.47%	-1.47%	54
Hudson Bay Fund LP		10.45%	3.63%	2.40	3	0.05	0.62%	0.72%	8.07%	3.56%	0.46	2.27	3	1.0%	0.3%	-0.7%	2.14%	0.80	4.02%	1.89%	32
Sculptor Domestic Partners II, L.P.		9.56%	8.13%	1.00	25	0.44	5.62%	6.50%	2.37%	4.88%	-0.81	0.49	34	1.0%	1.6%	0.6%	13.14%	0.75	8.19%	-4.95%	76
Multi-Strategy Average		7.44%	7.92%	1.35		0.25	3.19%	3.69%	2.99%	6.75%	-3.62	1.02								No. Funds	8
HFRI RV: Multi-Strategy Index		4.54%	4.10%	1.13		0.22	2.78%	3.21%	0.34%	2.55%	-1.69	0.13									
All Funds Average		5.61%	9.55%	0.60		0.24	3.16%	3.65%	1.36%	7.77%	-0.84	0.30								No. Funds	96
HFRI Fund Weighted Composite Index		7.08%	7.32%	0.98		0.45	5.85%	6.76%	-0.23%	2.81%	-1.11	-0.08									
HFRI Asset Weighted Composite Index		4.58%	5.91%	0.56		0.34	4.40%	5.08%	-1.20%	3.01%	-2.30	-0.40									
MSCI AC World Index Free - Net		14.40%	14.84%	1.04																	
Libor3Month		1.34%	0.27%																		



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Historical Return and Volatility					Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights					
5 Years ending December 31, 2021		Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank	
36 South Kohinoor Core Fund		-5.88%	40.65%	-0.03	65	-1.80	-23.22%	-26.86%	22.91%	30.51%	33.65	0.75	24	1.0%	-8.2%	-9.2%	-65.29%	0.50	0.43%	65.72%	1	
36 South Kohinoor Series Three Fund		-1.24%	14.09%	-0.12	71	-0.60	-7.73%	-8.94%	6.27%	10.88%	11.55	0.58	34	1.0%	-3.0%	-4.0%	-23.48%	0.50	1.01%	24.50%	4	
A.R.T. International Holdings (BVI) Ltd.		1.11%	3.72%	-0.04	67	0.08	0.98%	1.14%	-1.17%	3.54%	-2.14	-0.33	71	1.0%	0.5%	-0.5%	3.93%	0.60	3.54%	-0.39%	28	
Advent Global Partners (Cayman) Fund		5.67%	6.38%	0.69	30	0.29	3.80%	4.39%	0.48%	4.62%	-1.51	0.10	52	1.0%	1.9%	0.9%	15.43%	0.50	5.62%	-9.81%	79	
Aeolus Property Catastrophe Keystone PF Fund LP		-7.00%	14.85%	-0.49	82	-0.10	-1.24%	-1.44%	-6.06%	14.78%	0.70	-0.41	74	1.0%	2.0%	1.0%	15.99%	0.60	8.80%	-7.19%	67	
Aeolus Property Catastrophe Spire PF Fund LP		-2.79%	6.83%	-0.58	84	-0.06	-0.83%	-0.96%	-3.07%	6.76%	0.48	-0.45	77	1.0%	0.3%	-0.7%	2.75%	0.65	4.60%	1.84%	18	
Algert Global Equity Market Neutral Fund		-0.97%	8.09%	-0.25	75	0.02	0.24%	0.28%	-2.23%	8.08%	-2.54	-0.28	70	1.0%	1.4%	0.4%	11.34%	0.50	4.96%	-6.37%	59	
AlphaCat Advantage Fund		-7.30%	10.70%	-0.78	89	-0.06	-0.82%	-0.94%	-7.46%	10.66%	-0.34	-0.70	82	1.0%	2.0%	1.0%	15.97%	0.60	6.61%	-9.36%	76	
AlphaCat Diversified Fund		3.42%	2.44%	0.85	25	-0.01	-0.16%	-0.18%	2.23%	2.43%	-0.20	0.92	18	1.0%	0.1%	-1.0%	0.49%	0.65	2.23%	1.74%	19	
Alphadyne International Fund Ltd.		6.33%	7.60%	0.67	32	-0.01	-0.10%	-0.12%	5.22%	7.60%	4.77	0.69	28	1.0%	0.3%	-0.8%	2.05%	0.65	5.63%	3.58%	14	
AQR Global Stock Selection		-3.43%	10.15%	-0.43	79	-0.02	-0.26%	-0.30%	-4.06%	10.14%	-3.53	-0.40	73	1.0%	1.7%	0.7%	13.71%	0.60	6.67%	-7.04%	65	
AQR Liquid Enhanced Alternative Premia Fund, L.P.		-2.92%	11.47%	-0.32	77	0.13	1.63%	1.89%	-5.35%	11.31%	-6.04	-0.47	78	1.0%	2.9%	1.8%	22.67%	0.65	9.21%	-13.46%	82	
AQR Style Premia Fund, L.P.		-5.92%	13.38%	-0.49	81	0.06	0.80%	0.92%	-7.36%	13.35%	-5.58	-0.55	80	1.0%	1.9%	0.9%	15.22%	0.65	9.97%	-5.25%	51	
Aristeia Partners, L.P.		9.46%	5.14%	1.53	7	0.16	2.01%	2.33%	5.80%	4.59%	0.13	1.26	10	1.0%	1.0%	0.0%	8.04%	0.60	4.86%	-3.17%	39	
ArrowMark Income Opportunity Fund, L.P.		6.40%	4.75%	1.06	19	0.18	2.38%	2.75%	2.55%	3.87%	-3.37	0.66	29	1.0%	1.4%	0.4%	11.14%	0.60	4.68%	-6.47%	60	
Astignes Asia Rates Master Fund		3.03%	4.43%	0.40	48	-0.03	-0.36%	-0.42%	2.13%	4.41%	2.09	0.48	38	1.0%	0.0%	-1.0%	0.22%	0.65	3.38%	3.17%	16	
Barneget Fund		5.96%	8.94%	0.55	40	0.30	3.82%	4.42%	0.94%	7.78%	-1.86	0.12	51	1.0%	2.0%	1.0%	15.75%	0.65	8.38%	-7.37%	68	
BIL, Ltd.		4.39%	4.91%	0.63	34	0.17	2.19%	2.53%	0.85%	4.20%	-4.40	0.20	49	1.0%	1.4%	0.4%	11.23%	0.70	5.17%	-6.05%	56	
BlackRock 32 Capital Fund Ltd.		5.24%	9.64%	0.44	46	0.11	1.47%	1.70%	2.73%	9.49%	3.84	0.29	46	1.0%	1.8%	0.7%	13.99%	0.55	6.97%	-7.03%	64	
BlackRock Fixed Income Global Alpha Fund		4.71%	6.79%	0.52	43	0.27	3.44%	3.97%	-0.03%	5.51%	-2.50	-0.01	55	1.0%	2.4%	1.4%	18.90%	0.40	5.27%	-13.63%	83	
BlackRock Obsidian Fund		8.05%	11.32%	0.63	35	0.56	7.16%	8.29%	-0.28%	7.71%	-5.68	-0.04	57	1.0%	3.8%	2.7%	29.87%	0.50	9.42%	-20.45%	93	
40 BlackRock Obsidian Relative Value Strategy Fund		3.57%	3.97%	0.57	37	-0.04	-0.56%	-0.65%	2.83%	3.92%	2.98	0.72	26	1.0%	-0.4%	-1.4%	-2.78%	0.70	3.13%	5.91%	11	
BlackRock Pan Asia Opportunities Fund		2.02%	9.13%	0.12	59	0.02	0.30%	0.34%	0.77%	9.12%	-0.31	0.08	53	1.0%	1.9%	0.9%	14.85%	0.55	5.98%	-8.88%	72	
BlackRock Style Advantage Strategy		-5.15%	9.69%	-0.63	85	0.12	1.50%	1.73%	-7.69%	9.53%	-7.48	-0.81	87	1.0%	1.8%	0.8%	14.47%	0.50	6.53%	-7.94%	70	
BlueMatrix Fund		-2.31%	6.84%	-0.50	83	-0.06	-0.79%	-0.91%	-2.62%	6.77%	-1.36	-0.39	72	1.0%	0.6%	-0.4%	4.59%	0.60	4.30%	-0.30%	27	
Brookdale International Partners, L.P.		9.13%	6.91%	1.11	15	0.20	2.56%	2.96%	5.05%	6.25%	-5.10	0.81	22	1.0%	1.6%	0.6%	13.01%	0.50	5.60%	-7.41%	69	
Capstone Volatility		5.04%	5.14%	0.73	28	0.11	1.37%	1.58%	2.32%	4.89%	-0.53	0.48	39	1.0%	1.4%	0.4%	10.92%	0.65	4.86%	-6.06%	57	
Capula Global Relative Value Fund Ltd.		4.81%	1.60%	2.12	2	-0.01	-0.16%	-0.18%	3.56%	1.59%	0.64	2.24	1	1.0%	0.1%	-1.0%	0.54%	0.70	1.77%	1.23%	21	
Capula Tail Risk Fund		-2.08%	8.78%	-0.35	78	-0.45	-5.83%	-6.74%	2.94%	5.63%	5.05	0.52	36	1.0%	-2.5%	-3.5%	-20.01%	0.55	-0.06%	19.95%	5	
Capula Volatility Opportunities Trust		1.49%	6.15%	0.05	60	-0.25	-3.16%	-3.66%	3.59%	4.95%	3.94	0.73	25	1.0%	-1.6%	-2.6%	-12.86%	0.60	1.61%	14.47%	7	
Castle Creek ARB Fund		11.93%	10.11%	1.04	21	0.17	2.14%	2.47%	8.28%	9.80%	5.30	0.85	21	1.0%	1.4%	0.3%	10.83%	0.60	8.07%	-2.76%	35	
CC&L Market Neutral Strategy		5.49%	6.96%	0.61	36	0.02	0.30%	0.35%	3.96%	6.95%	-1.97	0.57	35	1.0%	1.6%	0.6%	12.58%	0.65	5.48%	-7.10%	66	
CFM Institutional Systematic Diversified Fund LP		-0.77%	6.97%	-0.27	76	0.17	2.16%	2.49%	-4.08%	6.51%	-4.56	-0.63	81	1.0%	2.0%	1.0%	15.77%	0.60	6.11%	-9.66%	78	
CFM Stratus		3.63%	6.45%	0.38	49	0.08	0.99%	1.14%	1.43%	6.34%	-0.69	0.23	48	1.0%	1.7%	0.7%	13.86%	0.65	5.54%	-8.31%	71	
Concordia G-10 Fixed Income Relative Value Fund		5.78%	3.27%	1.33	12	0.05	0.69%	0.80%	3.64%	3.17%	-1.08	1.15	11	1.0%	0.5%	-0.5%	4.15%	0.60	3.13%	-1.02%	29	
CQS Global Convertible Arbitrage Fund		5.95%	4.20%	1.08	16	0.19	2.50%	2.90%	1.97%	3.04%	0.34	0.65	30	1.0%	1.1%	0.0%	8.45%	0.65	4.42%	-4.03%	45	
Credit Suisse ILS IRIS Core Strategy		-2.66%	7.76%	-0.48	80	-0.01	-0.18%	-0.21%	-3.52%	7.76%	0.49	-0.45	76	1.0%	1.0%	0.0%	7.94%	0.45	4.13%	-3.81%	44	
DE Shaw Orienteer Fund, L.L.C.		5.70%	12.38%	0.41	47	0.66	8.48%	9.81%	-3.70%	7.55%	-7.62	-0.49	79	1.0%	4.0%	3.0%	32.07%	0.60	10.98%	-21.09%	94	
Elan Master Fund Ltd.		7.43%	2.97%	1.99	3	0.02	0.19%	0.22%	5.70%	2.96%	0.91	1.92	3	1.0%	0.2%	-0.8%	1.47%	0.65	2.82%	1.34%	20	
Elementum NatCat Fund		0.96%	3.07%	-0.11	70	0.03	0.41%	0.47%	-0.74%	3.04%	-0.13	-0.24	68	1.0%	0.8%	-0.2%	6.17%	0.60	2.85%	-3.32%	40	
52 Fulcrum Equity Dispersion Strategy		5.44%	8.51%	0.51	45	-0.15	-1.97%	-2.28%	6.35%	8.20%	4.56	0.77	23	1.0%	-1.7%	-2.7%	-13.69%	0.60	4.36%	18.05%	6	
GAM Alternative Risk Premia Strategy		1.17%	4.02%	-0.02	64	0.16	2.12%	2.46%	-2.27%	3.18%	-1.32	-0.71	83	1.0%	1.1%	0.1%	8.94%	0.60	4.09%	-4.85%	47	
GAM FCM Cat Bond - USD Open		3.90%	3.23%	0.79	27	0.05	0.60%	0.70%	1.93%	3.16%	-0.58	0.61	32	1.0%	0.8%	-0.2%	6.40%	0.70	3.37%	-3.03%	37	
Garda Fixed Income Relative Value Opportunity Fund		8.43%	3.96%	1.73	5	0.02	0.25%	0.29%	6.61%	3.95%	2.53	1.67	4	1.0%	0.4%	-0.6%	3.15%	0.65	3.49%	0.35%	23	
Graham Global Investment Fund I SPC Ltd. - Quant Macro S		7.15%	8.77%	0.68	31	0.25	3.20%	3.70%	2.68%	7.96%	-1.64	0.34	44	1.0%	1.2%	0.2%	9.83%	0.55	7.28%	-2.55%	34	
Iguazu Partners, L.P.		8.26%	6.79%	1.01	22	0.26	3.33%	3.85%	3.42%	5.60%	-0.88	0.61	31	1.0%	2.0%	1.0%	15.93%	0.65	6.63%	-9.30%	75	
ILS Orion Fund		0.16%	5.51%	-0.18	73	0.00	0.04%	0.05%	-1.06%	5.51%	0.26	-0.19	65	1.0%	1.3%	0.3%	10.11%	0.45	3.27%	-6.84%	63	
Juniper Catastrophe Fund L.P.		-6.11%	7.93%	-0.92	91	0.09	1.15%	1.33%	-8.49%	7.82%	-1.26	-1.09	91	1.0%	1.6%	0.6%	12.87%	0.60	6.23%	-6.64%	62	
Karya Fund		-2.00%	15.32%	-0.14	72	0.59	7.57%	8.76%	-9.92%	12.57%	-6.49	-0.79	86	1.0%	4.1%	3.1%	32.42%	0.55	12.75%	-19.66%	92	
Kepos Capital Alpha Fund		6.00%	15.51%	0.37	50	0.34	4.33%	5.00%	1.20%	14.68%	3.58	0.08	54	1.0%	3.4%	2.3%	26.62%	0.50	11.00%	-15.62%	87	
Kepos Exotic Beta Fund		-1.45%	10.26%	-0.22	74	0.39	5.06%	5.85%	-7.45%	8.43%	-7.75	-0.88	88	1.0%	3.4%	2.4%	26.80%	0.55	8.79%	-18.01%	91	
Laurion Capital, LP		13.17%	11.15%	1.05	20	-0.01	-0.10%	-0.11%	11.80%	11.15%	8.11	1.06	13	1.0%	-0.2%	-1.2%	-1.77%	0.70	8.50%	10.27%	9	
Lazard Rathmore Fund, Ltd.		8.04%	4.80%	1.36	10	0.19	2.39%	2.77%	4.07%	3.92%	-1.10	1.04	15	1.0%	1.3%	0.3%	10.34%	0.70	5.11%	-5.23%	50	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha							Asset vs. Risk Weights			Expected Return and Optimal Weights					
	5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank
	Leadenhall Diversified Fund	1.14%	2.55%	-0.06	68	0.00	-0.01%	-0.01%	-0.15%	2.55%	-0.21	-0.06	58	1.0%	0.6%	-0.4%	4.83%	0.60	2.28%	-2.54%	33
	Leadenhall Value Fund	-5.08%	9.28%	-0.65	88	0.04	0.57%	0.66%	-6.66%	9.26%	-0.32	-0.72	85	1.0%	2.1%	1.1%	16.59%	0.55	6.24%	-10.36%	80
	Linden Investors	13.41%	11.05%	1.08	18	0.40	5.19%	6.01%	6.59%	9.27%	-4.57	0.71	27	1.0%	3.3%	2.3%	26.29%	0.65	10.27%	-16.02%	89
	LMR Alpha Rates Trading Fund	6.69%	4.87%	1.08	17	0.06	0.72%	0.84%	4.53%	4.80%	-2.43	0.94	17	1.0%	1.2%	0.2%	9.38%	0.65	4.37%	-5.02%	48
	LMR Fund Limited	7.10%	12.27%	0.52	42	0.51	6.52%	7.54%	-0.31%	9.68%	-8.87	-0.03	56	1.0%	3.5%	2.5%	27.96%	0.70	11.91%	-16.05%	90
42	LOIM Alternative Risk Premia	-3.09%	5.18%	-0.84	90	0.06	0.73%	0.84%	-5.08%	5.11%	-1.56	-1.00	89	1.0%	0.9%	-0.1%	7.38%	0.50	3.80%	-3.58%	42
	Magdalena Partners, L.P.	5.97%	9.29%	0.53	41	0.24	3.09%	3.58%	1.70%	8.57%	1.81	0.20	50	1.0%	1.8%	0.7%	14.00%	0.60	7.98%	-6.02%	55
	Man Alternative Risk Premia - Class A	2.21%	6.82%	0.16	57	0.19	2.45%	2.83%	-1.44%	6.21%	-1.44	-0.23	67	1.0%	1.6%	0.6%	12.68%	0.60	6.13%	-6.55%	61
	Mariner Partners	9.05%	3.37%	2.20	1	0.10	1.35%	1.57%	6.02%	2.98%	-0.64	2.02	2	1.0%	0.8%	-0.2%	6.54%	0.50	3.16%	-3.38%	41
	Menta Global Offshore, Ltd	1.30%	7.34%	0.03	61	0.06	0.79%	0.91%	-0.58%	7.29%	-4.64	-0.08	61	1.0%	2.0%	1.0%	16.03%	0.60	5.66%	-10.37%	81
	NB Insurance-Linked Strategies Fund LP	5.40%	2.97%	1.34	11	-0.01	-0.08%	-0.10%	4.07%	2.97%	-0.54	1.37	7	1.0%	0.0%	-1.1%	-0.34%	0.60	2.48%	2.83%	17
	Nephila Catastrophe Fund L.P.	-2.67%	3.31%	-1.20	93	0.02	0.27%	0.31%	-4.26%	3.30%	-0.54	-1.29	93	1.0%	0.4%	-0.7%	2.93%	0.65	3.08%	0.16%	24
9	Nephila Magenta Fund Ltd. - Class A	0.04%	0.65%	-1.99	94	0.00	0.03%	0.03%	-1.32%	0.65%	0.00	-2.03	94	1.0%	0.1%	-1.0%	0.52%	0.60	1.17%	0.65%	22
	Nine Masts Feeder Fund I	0.74%	12.20%	0.02	62	0.38	4.86%	5.62%	-4.77%	10.83%	-11.99	-0.44	75	1.0%	3.4%	2.4%	26.79%	0.65	11.06%	-15.73%	88
	Nipun Asia Total Return Fund L.P.	2.38%	7.29%	0.18	55	0.13	1.68%	1.94%	-0.44%	7.02%	-0.23	-0.06	59	1.0%	1.8%	0.8%	14.32%	0.50	5.40%	-8.93%	73
	One River Dynamic Convexity Strategy	6.56%	19.44%	0.34	51	-0.75	-9.65%	-11.16%	16.54%	15.92%	16.56	1.04	14	1.0%	-4.7%	-5.7%	-37.39%	0.55	3.04%	40.43%	2
40	One River Volatility Relative Value Strategy	6.83%	3.58%	1.49	9	0.06	0.83%	0.96%	4.50%	3.45%	0.22	1.30	9	1.0%	0.0%	-1.0%	0.04%	0.55	3.22%	3.18%	15
	Palmetto Catastrophe Fund L.P.	-3.23%	4.86%	-0.92	92	0.07	0.91%	1.05%	-5.43%	4.75%	0.16	-1.14	92	1.0%	1.2%	0.2%	9.63%	0.65	4.45%	-5.17%	49
	Parallax Offshore Investors Fund Ltd.	5.07%	5.70%	0.66	33	0.08	1.05%	1.21%	2.70%	5.57%	1.45	0.48	37	1.0%	0.1%	-1.0%	0.44%	0.70	5.36%	4.92%	12
	Parsec Trading Corp.	5.58%	2.29%	1.80	4	0.06	0.77%	0.90%	3.34%	2.11%	-0.45	1.58	5	1.0%	0.4%	-0.6%	3.43%	0.50	2.34%	-1.09%	30
	Pillar Capital Juniperus Insurance Opportunity Fund Limited	1.23%	4.01%	-0.01	63	0.04	0.52%	0.60%	-0.56%	3.96%	0.61	-0.14	64	1.0%	0.7%	-0.3%	5.78%	0.60	3.49%	-2.30%	32
	Red Cliff Asia Fund	4.25%	10.85%	0.32	52	0.40	5.17%	5.98%	-1.85%	9.05%	-7.26	-0.20	66	1.0%	3.2%	2.2%	25.28%	0.65	10.12%	-15.16%	86
	Renaissance Institutional Diversified Global Equities Onshore	0.26%	11.34%	-0.04	66	0.03	0.40%	0.46%	-0.84%	11.33%	-9.35	-0.07	60	1.0%	1.5%	0.4%	11.58%	0.60	7.83%	-3.75%	43
	Rokos Global Macro Fund LP	2.55%	14.33%	0.16	58	-0.08	-1.08%	-1.25%	3.34%	14.27%	9.62	0.23	47	1.0%	0.6%	-0.4%	4.87%	0.65	9.31%	4.44%	13
	Securis Opportunities Fund	-4.48%	8.52%	-0.65	87	0.04	0.54%	0.63%	-6.08%	8.50%	0.45	-0.72	84	1.0%	1.9%	0.9%	15.23%	0.60	6.22%	-9.01%	74
	Segantii Asia-Pacific Equity Multi-Strategy Fund	8.61%	4.70%	1.50	8	0.06	0.71%	0.82%	6.34%	4.63%	0.30	1.37	8	1.0%	0.5%	-0.5%	4.33%	0.65	4.25%	-0.08%	26
	SSI Hedged Convertible Opportunity Strategy	9.62%	8.76%	0.95	23	0.39	5.09%	5.88%	3.04%	6.49%	-3.71	0.47	40	1.0%	2.8%	1.8%	22.46%	0.55	7.74%	-14.72%	84
58	Systematica Alternative Risk Premia	0.01%	9.01%	-0.10	69	0.10	1.34%	1.55%	-2.30%	8.88%	-0.89	-0.26	69	1.0%	1.5%	0.5%	12.04%	0.50	6.10%	-5.94%	54
	Tenor Opportunity Fund	9.02%	4.50%	1.65	6	0.19	2.41%	2.78%	4.95%	3.53%	-0.02	1.40	6	1.0%	1.3%	0.3%	10.22%	0.60	4.49%	-5.73%	53
	The Cassiopeia Fund	2.66%	11.03%	0.17	56	-0.30	-3.86%	-4.47%	5.83%	10.09%	9.01	0.58	33	1.0%	-3.0%	-4.0%	-23.45%	0.60	4.22%	27.67%	3
	Two Sigma Absolute Return Enhanced Fund, LP	5.60%	8.04%	0.55	39	0.12	1.50%	1.73%	2.91%	7.85%	-1.29	0.37	42	1.0%	1.3%	0.3%	10.62%	0.75	7.65%	-2.97%	36
	Two Sigma Absolute Return Fund, LP	4.01%	5.35%	0.51	44	0.08	0.99%	1.14%	1.73%	5.23%	-0.78	0.33	45	1.0%	0.9%	-0.1%	7.01%	0.75	5.34%	-1.67%	31
	Two Sigma Risk Premia Cayman Fund, Ltd.	2.52%	5.72%	0.23	54	0.15	1.90%	2.20%	-0.63%	5.29%	-2.79	-0.12	63	1.0%	1.1%	0.1%	8.63%	0.65	5.47%	-3.16%	38
	Two Sigma Risk Premia Enhanced Fund, LP	3.13%	8.65%	0.25	53	0.22	2.87%	3.32%	-0.84%	7.98%	-4.25	-0.11	62	1.0%	1.7%	0.6%	13.14%	0.65	7.88%	-5.26%	52
	Two Sigma Spectrum U.S. Fund, LP	5.91%	3.67%	1.22	14	0.05	0.64%	0.74%	3.83%	3.60%	0.81	1.06	12	1.0%	0.5%	-0.5%	3.80%	0.75	3.89%	0.09%	25
	Unigestion Alternative Risk Premia	-2.57%	5.90%	-0.64	86	0.14	1.79%	2.07%	-5.60%	5.53%	-5.05	-1.01	90	1.0%	1.4%	0.3%	10.86%	0.50	4.73%	-6.14%	58
	Voleon Global Strategy Fund	6.42%	7.47%	0.69	29	0.18	2.29%	2.65%	2.83%	6.99%	-3.72	0.41	41	1.0%	1.4%	0.4%	11.21%	0.60	6.49%	-4.73%	46
41	Volordige Fund	10.73%	10.70%	0.88	24	-0.02	-0.24%	-0.27%	9.71%	10.69%	1.60	0.91	19	1.0%	0.0%	-1.1%	-0.32%	0.60	7.02%	7.33%	10
24	Volordige Sustainability Fund	5.38%	7.37%	0.57	38	-0.16	-2.02%	-2.33%	6.25%	6.99%	5.29	0.90	20	1.0%	-1.2%	-2.2%	-9.55%	0.60	3.60%	13.15%	8
	Whitebox Relative Value Partners	8.89%	9.59%	0.80	26	0.37	4.77%	5.51%	2.80%	7.84%	-7.29	0.36	43	1.0%	3.0%	2.0%	23.93%	0.65	9.06%	-14.87%	85
	Wolverine Flagship Fund Trading Limited	10.12%	6.58%	1.30	13	0.31	3.95%	4.57%	4.49%	4.74%	-3.53	0.95	16	1.0%	2.0%	0.9%	15.63%	0.55	6.02%	-9.61%	77
	Group Average	3.17%	7.82%	0.38		0.07	0.93%	1.08%	1.13%	7.06%	-0.38	0.24								No. Funds	94
	HFRI Relative Value (Total) Index	4.58%	5.51%	0.86		0.29	3.75%	4.33%	-0.55%	3.41%	-3.18	-0.16									
	HFRI RV: Fixed Income-Sovereign Index	3.59%	6.58%	0.37		0.31	4.05%	4.68%	-1.74%	4.63%	-3.24	-0.38									
	HFRI RV: Volatility Index	0.62%	4.43%	-0.14		0.21	2.66%	3.08%	-3.36%	3.18%	-1.77	-1.06									
	HFRI EH: Equity Market Neutral Index	2.59%	2.79%	0.46		0.13	1.63%	1.89%	-0.42%	2.05%	-0.48	-0.20									
	MSCI AC World Index Free - Net	14.40%	14.84%	1.04																	
	Libor3Month	1.34%	0.27%																		

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights					
	5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to S&P LSTA	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank	
	400 Capital Credit Opportunities Fund LP	8.73%	10.09%	0.76	27	1.34	3.90%	9.20%	3.47%	4.16%	-16.20	0.83	22	1.1%	1.7%	0.6%	12.66%	0.60	14.87%	2.21%	48	
	AG Mortgage Value Partners, LP	7.59%	15.62%	0.48	46	2.09	6.08%	14.34%	0.97%	6.21%	-20.00	0.16	50	1.1%	2.6%	1.5%	19.40%	0.70	23.21%	3.81%	15	
	Altum Credit Fund, Ltd.	8.70%	12.82%	0.62	38	1.76	5.11%	12.05%	2.50%	4.36%	-10.95	0.57	37	1.1%	2.2%	1.1%	16.44%	0.55	18.38%	1.94%	54	
	Apollo Credit Strategies Fund	9.71%	2.73%	2.93	1	0.21	0.62%	1.46%	7.35%	2.31%	4.91	3.19	1	1.1%	0.2%	-0.9%	1.72%	0.65	4.11%	2.39%	43	
	Arkkan Opportunities Fund	10.03%	5.37%	1.57	4	0.64	1.87%	4.41%	6.41%	3.06%	-5.01	2.10	2	1.1%	0.9%	-0.2%	6.41%	0.60	8.16%	1.75%	59	
	Aurelius Capital	4.91%	7.88%	0.48	45	0.89	2.59%	6.11%	1.02%	4.98%	-8.96	0.21	47	1.1%	1.2%	0.1%	8.68%	0.65	11.71%	3.03%	23	
	Axonix Credit Opportunities Fund, LP	5.27%	14.86%	0.35	55	1.98	5.74%	13.55%	-0.99%	6.11%	-23.15	-0.16	58	1.1%	2.5%	1.4%	18.33%	0.50	20.93%	2.60%	37	
	Beach Point Securitized Credit Fund LP	6.33%	5.66%	0.88	19	0.73	2.11%	4.99%	2.73%	2.68%	-8.22	1.02	15	1.1%	0.9%	-0.2%	6.80%	0.70	8.93%	2.13%	49	
	Beach Point Total Return Fund II LP	5.54%	8.98%	0.50	43	1.26	3.65%	8.62%	0.59%	2.51%	-4.13	0.24	46	1.1%	1.6%	0.5%	11.55%	0.60	13.15%	1.59%	69	
	Birch Grove Credit Strategies Fund	6.12%	6.75%	0.72	29	0.83	2.41%	5.69%	2.27%	3.63%	-5.87	0.63	33	1.1%	1.1%	0.0%	8.21%	0.60	10.13%	1.92%	56	
	BlackRock Credit Alpha	13.14%	10.82%	1.08	10	1.26	3.67%	8.66%	7.73%	6.49%	11.11	1.19	12	1.1%	1.5%	0.4%	11.34%	0.55	15.26%	3.92%	13	
	BlueBay Credit Alpha Long Short Fund	7.53%	5.17%	1.18	7	-0.07	-0.20%	-0.48%	6.31%	5.15%	12.37	1.22	9	1.1%	-0.1%	-1.2%	-1.09%	0.60	3.24%	4.33%	7	
	Brigade Leveraged Capital Structures Fund LP	8.99%	10.05%	0.78	22	1.16	3.38%	7.97%	4.22%	6.12%	-10.03	0.69	29	1.1%	1.6%	0.5%	11.82%	0.60	14.50%	2.68%	34	
	Bybrook Capital Master Fund LP	7.74%	10.24%	0.65	35	-1.04	-3.03%	-7.16%	9.89%	7.32%	9.45	1.35	7	1.1%	-1.1%	-2.2%	-8.29%	0.60	-3.89%	4.41%	6	
	Canyon Value Realization Fund, L.P.	5.37%	12.72%	0.38	54	1.78	5.15%	12.16%	-0.71%	3.74%	-7.31	-0.19	59	1.1%	2.2%	1.1%	16.35%	0.60	18.36%	2.00%	52	
	Caspian Select Credit Fund, L.P.	5.48%	6.69%	0.64	36	0.92	2.67%	6.31%	1.38%	2.22%	-3.04	0.62	34	1.1%	1.1%	0.1%	8.48%	0.65	10.17%	1.69%	67	
	Centerbridge Credit Partners, L.P.	6.29%	7.80%	0.65	34	0.95	2.76%	6.51%	2.14%	4.29%	-4.63	0.50	40	1.1%	1.2%	0.1%	9.09%	0.65	11.77%	2.68%	35	
	CQS ABS Feeder Fund	4.17%	21.52%	0.27	60	2.84	8.24%	19.43%	-2.96%	9.25%	-29.98	-0.32	62	1.1%	3.7%	2.6%	26.91%	0.60	30.84%	3.93%	12	
	Credit Suisse Securitized Products Master Fund, Ltd.	6.50%	7.35%	0.72	30	0.98	2.85%	6.73%	2.22%	2.95%	-10.96	0.75	26	1.1%	1.3%	0.2%	9.28%	0.60	11.03%	1.75%	61	
	Davidson Kempner Distressed Opportunities Fund	5.28%	8.56%	0.49	44	1.12	3.25%	7.66%	0.73%	3.83%	-7.77	0.19	49	1.1%	1.5%	0.4%	11.03%	0.60	12.73%	1.70%	66	
	East Lodge Capital Credit Opportunities Fund	0.42%	13.18%	0.01	66	1.62	4.71%	11.11%	-4.91%	7.09%	-29.93	-0.69	68	1.1%	2.1%	1.0%	15.50%	0.60	19.04%	3.53%	19	
	EJF Debt Opportunities Fund	7.44%	10.19%	0.63	37	1.10	3.18%	7.51%	3.00%	6.89%	-15.80	0.44	41	1.1%	1.6%	0.5%	11.50%	0.55	14.04%	2.53%	39	
	Ellington Credit Opportunities Partners	7.22%	7.78%	0.77	23	0.95	2.76%	6.52%	3.02%	4.24%	-11.68	0.71	27	1.1%	1.3%	0.2%	9.61%	0.60	11.54%	1.93%	55	
	Ellington Mortgage Opportunities Fund	3.82%	6.54%	0.40	52	0.88	2.54%	6.00%	-0.08%	2.59%	0.04	-0.03	54	1.1%	1.0%	-0.1%	7.13%	0.75	10.28%	3.15%	20	
	Eos Credit Opportunities	2.41%	5.14%	0.23	61	0.65	1.88%	4.44%	-0.83%	2.58%	1.50	-0.32	61	1.1%	0.8%	-0.3%	5.72%	0.55	7.79%	2.07%	51	
	Farmstead Capital Master Fund, Ltd.	6.20%	9.91%	0.53	42	1.04	3.01%	7.09%	1.99%	6.91%	-15.95	0.29	44	1.1%	1.5%	0.4%	11.09%	0.65	14.21%	3.12%	21	
	GCA Credit Opportunities Fund, LLC	3.57%	2.04%	1.09	9	0.17	0.51%	1.20%	1.67%	1.65%	3.29	1.01	16	1.1%	0.2%	-0.9%	1.53%	0.60	3.26%	1.73%	63	
45	GCA Enhanced Fund, LLC	6.48%	3.82%	1.32	5	0.33	0.97%	2.29%	4.00%	3.06%	6.61	1.30	8	1.1%	0.4%	-0.7%	2.88%	0.70	5.80%	2.92%	24	
	Gladwyne European Credit Opportunities Fund	2.39%	8.55%	0.16	63	0.94	2.73%	6.43%	-1.51%	5.63%	-5.79	-0.27	60	1.1%	1.3%	0.2%	9.38%	0.55	11.98%	2.60%	38	
	GoldenTree Credit Opportunities, L.P.	6.45%	14.37%	0.43	51	2.06	5.97%	14.09%	-0.28%	2.78%	-4.78	-0.10	55	1.1%	2.5%	1.4%	18.40%	0.55	20.09%	1.69%	68	
	Gracie Credit Opportunities Fund, L.P.	3.82%	5.98%	0.43	50	-0.36	-1.03%	-2.43%	3.71%	5.47%	15.22	0.68	31	1.1%	-0.4%	-1.5%	-3.18%	0.65	1.24%	4.42%	5	
	Greylock Global Opportunity Fund	-4.15%	16.79%	-0.24	69	1.85	5.37%	12.68%	-9.78%	11.02%	-12.09	-0.89	70	1.1%	2.5%	1.4%	18.61%	0.55	22.83%	4.22%	10	
	HG Vora Special Opportunities Fund	9.77%	11.36%	0.77	24	1.56	4.53%	10.69%	3.86%	3.83%	0.95	1.01	17	1.1%	1.9%	0.8%	13.68%	0.65	16.76%	3.08%	22	
	Highbridge Tactical Credit & Convertibles Fund	8.72%	5.97%	1.21	6	0.55	1.61%	3.79%	5.51%	4.61%	3.79	1.20	11	1.1%	0.8%	-0.3%	5.61%	0.60	8.31%	2.71%	32	
	Indaba Capital Partners	10.23%	11.31%	0.81	20	1.48	4.31%	10.16%	4.50%	4.96%	0.54	0.91	19	1.1%	1.8%	0.7%	13.40%	0.50	16.08%	2.68%	33	
	JP All Seasons Asian Credit Fund	-3.09%	13.70%	-0.25	70	1.18	3.43%	8.09%	-7.15%	11.06%	-8.25	-0.65	66	1.1%	1.6%	0.5%	11.76%	0.50	16.51%	4.75%	4	
	JLP Credit Opportunities Fund	-0.36%	16.17%	-0.02	67	1.56	4.52%	10.67%	-5.18%	12.15%	-6.84	-0.43	65	1.1%	2.3%	1.2%	16.71%	0.50	20.31%	3.60%	17	
	King Street Capital, L.P.	6.55%	7.30%	0.72	28	0.78	2.28%	5.37%	2.85%	4.94%	2.76	0.58	36	1.1%	1.1%	0.0%	7.87%	0.80	11.50%	3.62%	16	
	King Street Europe LP	3.66%	8.50%	0.31	59	0.65	1.89%	4.47%	0.60%	7.23%	-4.32	0.08	51	1.1%	0.9%	-0.2%	6.32%	0.70	11.47%	5.14%	3	
	Knighthood Master Fund	5.77%	8.38%	0.55	41	0.79	2.29%	5.40%	2.19%	6.41%	8.16	0.34	42	1.1%	1.0%	-0.1%	7.52%	0.65	11.74%	4.23%	9	
56	Lodbrok Long/Short European Credit Fund	5.44%	7.63%	0.56	39	0.04	0.12%	0.29%	4.13%	7.63%	-13.65	0.54	38	1.1%	0.3%	-0.8%	2.50%	0.55	5.32%	2.82%	26	
	Marathon Special Opportunity Fund, L.P.	0.02%	10.22%	-0.08	68	1.21	3.52%	8.31%	-4.54%	5.95%	0.61	-0.76	69	1.1%	1.5%	0.4%	11.28%	0.60	14.82%	3.55%	18	
	Marblegate Special Opportunities Master Fund	6.68%	6.00%	0.89	17	0.68	1.98%	4.66%	3.22%	3.78%	-5.40	0.85	21	1.1%	0.9%	-0.2%	6.38%	0.65	9.11%	2.72%	31	
	MidOcean Absolute Return Credit Fund	5.66%	6.68%	0.66	33	0.91	2.65%	6.25%	1.58%	2.37%	4.59	0.67	32	1.1%	1.0%	-0.1%	7.56%	0.65	10.19%	2.63%	36	
	MidOcean Credit Opportunity Fund	2.33%	7.57%	0.17	62	1.02	2.97%	7.00%	-1.90%	2.87%	-2.49	-0.66	67	1.1%	1.3%	0.2%	9.40%	0.55	11.18%	1.78%	57	
	Monarch Debt Recovery Fund, Ltd.	7.18%	5.87%	0.99	12	0.62	1.81%	4.28%	3.86%	4.02%	-8.24	0.96	18	1.1%	0.9%	-0.2%	6.80%	0.60	8.58%	1.78%	58	
	Mudrick Distressed Opportunity Fund	12.80%	17.60%	0.69	31	0.80	2.33%	5.50%	9.73%	16.72%	2.87	0.58	35	1.1%	1.1%	0.0%	8.16%	0.65	18.57%	10.41%	1	
	Napier Park Select Fund, LP	8.34%	10.81%	0.68	32	1.46	4.24%	10.01%	2.79%	4.09%	-6.52	0.68	30	1.1%	1.9%	0.8%	13.91%	0.55	15.65%	1.74%	62	
	One William Street Capital Partners	8.23%	8.84%	0.80	21	1.11	3.22%	7.59%	3.58%	4.53%	-13.15	0.79	24	1.1%	1.5%	0.4%	10.79%	0.65	13.29%	2.50%	40	
	OWS Credit Opportunity Fund, L.P.	8.68%	8.15%	0.91	14	1.07	3.09%	7.30%	4.07%	3.63%	-13.20	1.12	13	1.1%	1.4%	0.3%	10.30%	0.70	12.52%	2.22%	45	
	OWS Credit Opportunity Offshore Fund, Ltd.	8.64%	8.15%	0.90	16	1.07	3.10%	7.30%	4.04%	3.63%	-13.18	1.11	14	1.1%	1.4%	0.3%	10.31%	0.70	12.52%	2.21%	46	
	Palmerston European Credit Fund	8.66%	4.20%	1.69	2	0.44	1.27%	3.01%	5.73%	2.93%	3.67	1.96	3	1.1%	0.5%	-0.6%	3.92%	0.60	6.31%	2.40%	42	
	PIMCO Global Credit Opportunity Onshore Fund LLC	4.56%	7.61%	0.45	49	-0.19	-0.56%	-1.31%	4.02%	7.50%	0.82	0.54	39	1.1%	0.0%	-1.1%	-0.23%	0.65	3.97%	4.20%	11	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
5 Years ending December 31, 2021					Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights					
Historical Return and Volatility																					
	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to S&P LSTA	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied	Rank	
Prudential Emerging Markets Debt Long/Short	4.70%	9.39%	0.40	53	1.22	3.55%	8.37%	-0.07%	4.25%	1.82	-0.02	53	1.1%	1.4%	0.3%	10.64%	0.50	13.46%	2.81%	27	
Redwood Offshore Fund, Ltd.	9.41%	10.93%	0.76	25	1.46	4.24%	10.01%	3.77%	4.39%	4.44	0.86	20	1.1%	1.8%	0.7%	13.45%	0.65	16.25%	2.80%	26	
Redwood Opportunity Offshore Fund, Ltd.	10.66%	9.76%	0.96	13	1.37	3.99%	9.41%	5.07%	2.60%	-1.33	1.95	4	1.1%	1.7%	0.6%	12.45%	0.60	14.20%	1.75%	60	
Rimrock High Income Plus Fund	2.99%	5.65%	0.32	57	0.70	2.05%	4.83%	-0.40%	2.94%	-8.79	-0.14	57	1.1%	0.9%	-0.2%	6.90%	0.60	8.62%	1.72%	64	
Riva Ridge	8.38%	4.19%	1.63	3	0.03	0.08%	0.20%	6.74%	4.19%	3.04	1.61	5	1.1%	0.1%	-1.0%	0.74%	0.50	3.10%	2.36%	44	
Sculptor Credit Opportunities Domestic Partners, L.P.	6.99%	11.05%	0.55	40	1.46	4.23%	9.98%	1.59%	4.73%	-14.71	0.34	43	1.1%	1.9%	0.8%	14.23%	0.65	16.44%	2.21%	47	
Silver Point Capital Offshore Fund, Ltd.	9.52%	7.18%	1.12	8	0.81	2.36%	5.58%	5.53%	4.52%	-1.75	1.22	10	1.1%	1.1%	0.0%	8.40%	0.60	10.51%	2.12%	50	
Strategic Value Restructuring Fund	8.09%	7.49%	0.90	15	0.73	2.13%	5.01%	4.48%	5.56%	-3.30	0.81	23	1.1%	1.0%	-0.1%	7.70%	0.60	10.43%	2.73%	30	
Symphony Long-Short Credit Fund	3.75%	5.33%	0.47	47	0.57	1.65%	3.89%	0.73%	3.64%	-2.23	0.20	48	1.1%	0.8%	-0.3%	5.92%	0.60	7.86%	1.95%	53	
TCM Asia Opportunities Fund	2.00%	7.25%	0.13	65	0.80	2.31%	5.45%	-1.56%	4.78%	0.15	-0.33	64	1.1%	1.0%	-0.1%	7.67%	0.60	10.52%	2.84%	25	
Tilden Park Investment Fund	2.44%	11.47%	0.16	64	1.32	3.82%	9.02%	-2.30%	7.08%	-14.64	-0.33	63	1.1%	1.7%	0.6%	12.87%	0.65	16.75%	3.88%	14	
TOR Asia Credit Fund	3.04%	3.79%	0.46	48	0.29	0.84%	1.97%	0.85%	3.24%	-6.81	0.26	45	1.1%	0.5%	-0.6%	3.32%	0.55	5.03%	1.70%	65	
Varadero	6.08%	4.35%	1.08	11	0.56	1.63%	3.83%	2.94%	2.05%	-8.13	1.43	6	1.1%	0.7%	-0.4%	5.25%	0.60	6.83%	1.59%	70	
Varde Investment Partners	4.00%	9.31%	0.33	56	1.18	3.42%	8.07%	-0.60%	4.64%	-9.06	-0.13	56	1.1%	1.5%	0.4%	11.22%	0.65	13.97%	2.75%	29	
Venor Capital Partners	10.51%	10.45%	0.88	18	1.00	2.91%	6.85%	6.12%	7.88%	2.65	0.78	25	1.1%	1.3%	0.2%	9.84%	0.60	14.15%	4.30%	8	
VR Global Offshore Fund	5.14%	16.22%	0.32	58	1.46	4.23%	9.99%	0.57%	12.77%	-4.80	0.04	52	1.1%	2.0%	0.9%	15.10%	0.60	21.04%	5.94%	2	
Waterfall Eden Fund, L.P.	7.32%	8.03%	0.76	26	1.00	2.89%	6.82%	3.01%	4.24%	-16.90	0.71	28	1.1%	1.3%	0.2%	9.66%	0.65	12.13%	2.48%	41	
Group Average	6.04%	9.00%	0.66		0.97	2.81%	6.62%	2.02%	5.14%	-5.07	0.54								No. Funds	70	
HFRI ED: Distressed/Restructuring Index	6.81%	7.64%	0.93		0.94	2.74%	6.46%	2.64%	4.07%	0.67	0.65										
HFRI RV: Fixed Income-Corporate Index	5.68%	6.41%	0.92		0.33	4.25%	4.92%	0.04%	4.11%	-3.08	0.01										
Bloomberg US High Yield Bond Index	6.29%	7.37%	0.69		0.41	5.26%	6.08%	-0.35%	4.16%	-2.62	-0.09										
S&P/LSTA Leveraged Loan Index	4.28%	6.80%	0.46																		
Libor3Month	1.34%	0.27%																			

		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha							Asset vs. Risk Weights			Expected Return and Optimal Weights					
5 Years ending December 31, 2021						Beta to MSCI	Beta	Beta	Alpha	Alpha		Info	Info								
		Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	ACWI	Return	Risk	Return	Risk	Convexity	Ratio	Ratio Rank	Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Implied Return	Rank
15	Bardin-Hill Event Driven Fund	7.25%	9.32%	0.66	27	0.34	4.33%	5.01%	1.67%	7.85%	-4.84	0.21	20	2.2%	1.7%	-0.6%	6.03%	0.60	8.38%	2.34%	18
	Black Diamond Arbitrage	6.22%	3.54%	1.35	4	0.10	1.34%	1.55%	3.40%	3.18%	-1.59	1.07	4	2.2%	0.5%	-1.7%	1.81%	0.65	3.73%	1.91%	29
	Cambrian Fund	-0.15%	32.94%	0.13	43	1.86	24.00%	27.75%	-20.52%	17.74%	-2.03	-1.16	43	2.2%	6.5%	4.3%	23.79%	0.50	25.73%	1.94%	28
	CastleKnight Master Fund LP	15.13%	13.04%	1.05	9	0.29	3.72%	4.30%	9.79%	12.31%	4.79	0.80	5	2.2%	1.3%	-0.9%	4.85%	0.60	10.64%	5.80%	2
	Cevian Capital II, LP	8.08%	18.21%	0.45	38	1.05	13.56%	15.68%	-5.85%	9.26%	-1.24	-0.63	42	2.2%	3.8%	1.6%	13.88%	0.65	15.88%	2.00%	27
24	Corsair Capital	7.71%	12.48%	0.55	34	0.75	9.63%	11.14%	-3.01%	5.62%	-3.49	-0.54	39	2.2%	2.7%	0.5%	9.93%	0.50	10.03%	0.10%	41
	Davidson Kempner International, Ltd.	5.28%	5.03%	0.79	19	0.24	3.15%	3.64%	0.71%	3.47%	-2.72	0.20	21	2.2%	1.0%	-1.2%	3.82%	0.75	5.47%	1.66%	33
	ECF Value Fund	14.66%	23.05%	0.66	26	1.40	18.03%	20.85%	-3.37%	9.83%	-2.78	-0.34	37	2.2%	5.2%	2.9%	18.83%	0.50	17.77%	-1.05%	43
	Elliott International Limited	8.56%	2.85%	2.44	1	0.04	0.52%	0.60%	6.42%	2.78%	0.37	2.31	1	2.2%	0.2%	-2.0%	0.71%	0.80	3.33%	2.63%	13
	Empyrean Capital Fund	6.98%	6.37%	0.88	15	0.25	3.22%	3.72%	2.32%	5.17%	-2.63	0.45	15	2.2%	1.1%	-1.1%	4.17%	0.70	6.54%	2.37%	17
	Engaged Capital Flagship Fund	16.07%	25.87%	0.65	29	1.32	17.02%	19.68%	-0.66%	16.80%	0.95	-0.04	30	2.2%	5.0%	2.8%	18.39%	0.50	20.58%	2.19%	24
	Engine No. 1 Perennial Fund LP	9.67%	7.35%	1.11	7	0.25	3.17%	3.67%	4.92%	6.37%	3.01	0.77	6	2.2%	0.8%	-1.4%	3.09%	0.55	6.39%	3.30%	8
	Freshford Partners	11.17%	14.76%	0.70	24	0.78	10.08%	11.66%	-0.01%	9.05%	1.27	0.00	27	2.2%	3.0%	0.8%	11.11%	0.55	12.50%	1.39%	37
	Gabelli Associates	4.98%	4.86%	0.75	21	0.24	3.04%	3.51%	0.52%	3.36%	-1.49	0.16	23	2.2%	1.0%	-1.2%	3.64%	0.60	4.81%	1.18%	39
	Glazer Capital Management	6.16%	5.03%	0.95	12	0.15	1.90%	2.20%	2.83%	4.52%	0.45	0.63	11	2.2%	0.7%	-1.5%	2.48%	0.65	4.97%	2.49%	15
	Governors Lane Onshore Fund LP	5.76%	7.50%	0.61	31	0.36	4.60%	5.31%	-0.18%	5.30%	-1.64	-0.03	29	2.2%	1.5%	-0.7%	5.49%	0.55	6.76%	1.26%	38
	Ichigo Trust	6.80%	17.81%	0.38	41	0.82	10.55%	12.20%	-4.03%	12.97%	-6.21	-0.31	36	2.2%	3.0%	0.8%	10.93%	0.50	14.33%	3.40%	7
	Jet Capital Concentrated Fund	6.33%	7.77%	0.66	28	0.26	3.38%	3.90%	1.63%	6.72%	0.91	0.24	19	2.2%	1.1%	-1.1%	3.98%	0.55	6.72%	2.74%	11
	Melqart Opportunities Master Fund Ltd	10.61%	16.32%	0.63	30	0.80	10.27%	11.87%	-0.35%	11.20%	-7.48	-0.03	28	2.2%	3.4%	1.2%	12.57%	0.60	14.37%	1.80%	31
	Nineteen77 Global Merger Arbitrage	8.68%	7.43%	0.98	11	0.18	2.31%	2.67%	4.91%	6.93%	-0.52	0.71	9	2.2%	1.0%	-1.3%	3.50%	0.60	6.47%	2.97%	10
	Oceanwood Capital Management	8.53%	15.04%	0.54	36	0.76	9.81%	11.34%	-2.06%	9.88%	-3.77	-0.21	33	2.2%	2.9%	0.7%	10.72%	0.55	12.78%	2.05%	25
	Omni Event Fund	9.97%	10.10%	0.86	16	0.30	3.91%	4.52%	4.69%	9.03%	-3.66	0.52	12	2.2%	1.6%	-0.6%	5.76%	0.60	8.80%	3.04%	9
	Owl Creek Overseas Fund, Ltd.	5.86%	14.57%	0.38	42	0.71	9.11%	10.54%	-3.90%	10.07%	-3.94	-0.39	38	2.2%	2.9%	0.6%	10.43%	0.60	12.91%	2.48%	16
	P2 Capital Fund	11.07%	21.91%	0.54	35	1.31	16.94%	19.59%	-5.64%	9.81%	-5.18	-0.57	40	2.2%	5.0%	2.8%	18.19%	0.55	17.53%	-0.66%	42
	Pentwater Event Fund	10.75%	15.30%	0.66	25	0.73	9.45%	10.93%	0.40%	10.70%	-3.46	0.04	25	2.2%	3.1%	0.9%	11.32%	0.60	13.52%	2.21%	23
	Portland Hill	8.04%	12.92%	0.56	32	0.68	8.71%	10.07%	-1.72%	8.10%	-1.43	-0.21	34	2.2%	2.3%	0.1%	8.44%	0.50	10.65%	2.21%	22
	PrimeStone Capital Master Fund LP	11.67%	15.42%	0.71	23	0.85	10.98%	12.69%	-0.38%	8.75%	-2.38	-0.04	31	2.2%	3.2%	0.9%	11.52%	0.55	12.94%	1.42%	36
	PSAM WorldArb Fund	9.93%	9.42%	0.92	13	0.39	5.06%	5.85%	3.40%	7.38%	-3.35	0.46	14	2.2%	1.8%	-0.5%	6.39%	0.55	8.21%	1.83%	30
	PSquared US Feeder Fund, LP	9.01%	5.29%	1.41	3	0.06	0.81%	0.93%	6.63%	5.20%	0.68	1.27	3	2.2%	0.2%	-2.0%	0.71%	0.70	4.94%	4.23%	5
Sachem Head	18.35%	14.21%	1.17	5	0.75	9.63%	11.14%	6.68%	8.82%	2.49	0.76	8	2.2%	2.9%	0.7%	10.48%	0.60	12.52%	2.04%	26	
Sand Grove Opportunities Fund	12.96%	14.78%	0.81	18	0.51	6.55%	7.57%	5.27%	12.69%	-2.84	0.41	16	2.2%	2.5%	0.3%	9.12%	0.60	12.77%	3.64%	6	
Sarissa Capital	12.51%	23.28%	0.56	33	0.66	8.55%	9.88%	4.20%	21.08%	-2.79	0.20	22	2.2%	2.4%	0.2%	8.81%	0.55	18.09%	9.28%	1	
Senator Global Opportunity Fund LP	11.31%	9.76%	1.01	10	0.53	6.89%	7.97%	2.79%	5.64%	2.10	0.49	13	2.2%	1.9%	-0.3%	7.01%	0.70	9.33%	2.32%	19	
Standard General	6.98%	14.79%	0.44	39	0.42	5.37%	6.21%	0.96%	13.42%	0.55	0.07	24	2.2%	2.1%	-0.1%	7.84%	0.60	12.42%	4.58%	3	
Starboard Value and Opportunity Fund LP	12.17%	9.47%	1.12	6	0.47	6.01%	6.95%	4.44%	6.43%	-0.05	0.69	10	2.2%	1.7%	-0.5%	6.26%	0.65	8.98%	2.71%	12	
Taconic Opportunity Fund L.P.	5.73%	5.15%	0.85	17	0.22	2.83%	3.28%	1.47%	3.98%	-2.71	0.37	17	2.2%	1.0%	-1.2%	3.68%	0.70	5.45%	1.77%	32	
Taiyo Fund	8.51%	20.38%	0.44	40	0.95	12.19%	14.10%	-3.62%	14.71%	-2.15	-0.25	35	2.2%	3.3%	1.1%	12.02%	0.50	16.30%	4.28%	4	
Tensile Capital Partners	11.67%	13.88%	0.77	20	0.80	10.36%	11.98%	0.04%	7.00%	-2.00	0.01	26	2.2%	2.8%	0.6%	10.32%	0.60	11.91%	1.59%	34	
Third Point Partners Qualified L.P.	12.83%	12.80%	0.91	14	0.70	8.97%	10.37%	2.36%	7.50%	-1.54	0.31	18	2.2%	2.5%	0.3%	9.14%	0.65	11.66%	2.51%	14	
TIG Arbitrage Enhanced Fund	8.36%	6.36%	1.09	8	0.20	2.54%	2.94%	4.31%	5.64%	-1.35	0.76	7	2.2%	1.0%	-1.2%	3.57%	0.60	5.85%	2.28%	20	
Triar Partners	8.24%	15.44%	0.51	37	0.91	11.72%	13.55%	-4.26%	7.40%	-0.81	-0.58	41	2.2%	3.2%	1.0%	11.60%	0.60	13.06%	1.47%	35	
Tudor Riverbend Crossing Partners	6.01%	3.15%	1.45	2	0.00	0.04%	0.04%	4.53%	3.15%	0.17	1.44	2	2.2%	0.1%	-2.1%	0.28%	0.55	2.51%	2.23%	21	
ValueAct Capital Partners II, L.P.	13.83%	18.67%	0.72	22	1.13	14.53%	16.80%	-1.54%	8.13%	-1.65	-0.19	32	2.2%	4.1%	1.8%	14.77%	0.60	15.39%	0.63%	40	
Group Average		9.31%	12.64%	0.81		0.59	7.65%	8.84%	0.70%	8.49%	-1.53	0.23								No. Funds	43
HFRI Event-Driven (Total) Index		6.81%	8.15%	0.88		0.46	5.96%	6.89%	-0.53%	4.36%	-2.30	-0.12									
HFRI ED: Multi-Strategy Index		4.77%	6.93%	0.52		0.35	4.49%	5.20%	-1.06%	4.59%	1.10	-0.23									
MSCI AC World Index Free - Net		14.40%	14.84%	1.04																	
Libor3Month		1.34%	0.27%																		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha							Asset vs. Risk Weights			Expected Return and Optimal Weights					
	5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank
	1798 Volantis Fund	11.95%	10.49%	1.01	31	0.42	5.38%	6.22%	5.01%	8.45%	-0.73	0.59	39	1.0%	0.8%	-0.1%	6.88%	0.60	9.44%	2.55%	36
	37 Capital bluescale Fund, LP	3.01%	11.51%	0.20	91	0.26	3.37%	3.90%	-1.18%	10.83%	0.85	-0.11	78	1.0%	1.0%	0.0%	7.85%	0.65	10.06%	2.21%	43
	AB Arya Partners	7.40%	5.75%	1.04	29	0.12	1.50%	1.74%	4.45%	5.48%	0.07	0.81	20	1.0%	0.5%	-0.5%	3.76%	0.50	4.51%	0.74%	82
	AKO Partners	16.15%	9.03%	1.56	4	0.35	4.51%	5.22%	9.48%	7.38%	3.20	1.29	7	1.0%	0.6%	-0.3%	5.31%	0.60	8.21%	2.90%	30
	Alkeon Growth Fund	17.54%	15.26%	1.05	28	0.59	7.64%	8.83%	8.21%	12.44%	5.00	0.66	31	1.0%	1.6%	0.6%	12.90%	0.55	12.73%	-0.17%	93
	American Steadfast, LP	7.86%	9.48%	0.71	54	0.33	4.30%	4.98%	2.27%	8.07%	-1.39	0.28	60	1.0%	0.9%	-0.1%	7.37%	0.60	8.49%	1.12%	72
	Archipelago Partners, LP.	8.18%	7.85%	0.87	42	0.44	5.70%	6.59%	0.99%	4.27%	-1.34	0.23	65	1.0%	0.9%	-0.1%	7.31%	0.65	7.36%	0.05%	91
32	Atreides Foundation Master Fund LP	13.51%	11.03%	1.09	24	0.30	3.83%	4.43%	8.03%	10.10%	2.71	0.79	22	1.0%	0.9%	-0.1%	7.07%	0.60	9.39%	2.33%	42
	Bay Pond Partners, L.P.	14.20%	22.08%	0.66	64	1.18	15.15%	17.52%	-1.09%	13.44%	-4.07	-0.08	77	1.0%	2.5%	1.5%	20.07%	0.65	19.66%	-0.40%	94
	Biotechnology Value Fund, L.P., II	26.82%	22.75%	1.11	23	1.08	13.91%	16.08%	10.82%	16.09%	5.99	0.67	30	1.0%	2.1%	1.2%	17.58%	0.60	19.75%	2.16%	44
	BlackRock Strategic Equity Hedge Fund Limited	17.36%	9.92%	1.54	5	0.26	3.33%	3.85%	11.83%	9.14%	0.88	1.29	6	1.0%	0.9%	-0.1%	7.24%	0.60	8.48%	1.24%	68
	Bloom Tree Fund, LP	3.19%	12.44%	0.21	90	0.37	4.80%	5.55%	-2.37%	11.14%	0.31	-0.21	82	1.0%	1.0%	0.0%	7.93%	0.60	10.66%	2.73%	32
	BlueSpruce Fund LP	13.23%	10.85%	1.08	26	0.60	7.68%	8.88%	3.82%	6.24%	1.03	0.61	36	1.0%	1.1%	0.1%	8.83%	0.55	9.34%	0.51%	87
	Cadian Fund LP	12.97%	19.96%	0.65	66	0.46	5.98%	6.92%	6.78%	18.72%	6.30	0.36	55	1.0%	1.5%	0.5%	12.17%	0.65	16.94%	4.77%	12
	Carrhae Capital Fund, Ltd.	8.47%	7.69%	0.93	39	0.16	2.06%	2.38%	5.00%	7.32%	4.50	0.68	28	1.0%	0.3%	-0.6%	2.80%	0.60	6.53%	3.73%	16
	Coatue Fund	20.06%	14.69%	1.23	14	0.62	8.02%	9.27%	9.88%	11.40%	1.51	0.87	17	1.0%	1.4%	0.4%	11.67%	0.60	12.98%	1.30%	67
	Crescent Park Partners LP	10.91%	15.56%	0.66	63	0.74	9.51%	11.00%	0.48%	11.00%	-4.39	0.04	75	1.0%	1.7%	0.7%	13.83%	0.60	13.74%	-0.09%	92
	Dorsal Capital Partners, L.P.	6.18%	5.41%	0.89	41	0.07	0.93%	1.08%	3.86%	5.30%	0.17	0.73	25	1.0%	0.3%	-0.7%	2.51%	0.55	4.30%	1.79%	51
	Dragon Billion China Fund	6.37%	10.30%	0.52	75	0.21	2.66%	3.08%	2.65%	9.83%	1.91	0.27	62	1.0%	0.5%	-0.5%	3.79%	0.50	7.46%	3.67%	18
	Egerton Long/Short (USD) Fund Limited	11.09%	10.48%	0.93	37	0.56	7.24%	8.38%	2.31%	6.30%	-2.75	0.37	54	1.0%	1.1%	0.1%	9.24%	0.70	10.03%	0.79%	81
	Electron Global Fund	14.60%	17.10%	0.81	47	0.73	9.39%	10.86%	4.23%	13.21%	-4.78	0.32	57	1.0%	1.4%	0.5%	11.85%	0.55	14.33%	2.48%	38
	Eminence Partners	7.01%	16.57%	0.41	81	0.75	9.63%	11.13%	-3.13%	12.27%	4.68	-0.26	84	1.0%	1.5%	0.5%	11.91%	0.60	14.58%	2.68%	34
	Encompass Capital Fund	12.91%	12.88%	0.91	40	0.00	-0.02%	-0.03%	11.71%	12.88%	1.09	0.91	15	1.0%	0.1%	-0.8%	1.17%	0.60	8.47%	7.30%	3
	Engle Capital Master Fund Ltd	11.45%	10.46%	0.97	33	0.34	4.38%	5.06%	5.60%	9.16%	-4.71	0.61	38	1.0%	1.0%	0.0%	8.30%	0.60	9.19%	0.89%	79
	FengHe Asia Fund Limited	17.31%	9.06%	1.67	2	0.31	3.99%	4.61%	11.03%	7.79%	-2.63	1.41	3	1.0%	0.5%	-0.5%	4.29%	0.65	8.50%	4.21%	14
	Glenview Institutional Partners, L.P.	11.30%	25.82%	0.49	76	1.43	18.46%	21.35%	-6.29%	14.52%	0.08	-0.43	90	1.0%	2.3%	1.3%	19.07%	0.65	22.58%	3.51%	20
	Golden China Fund	15.39%	17.62%	0.83	45	0.70	9.07%	10.48%	5.26%	14.15%	0.56	0.37	53	1.0%	1.5%	0.5%	12.23%	0.50	13.92%	1.69%	54
	Half Sky Master Fund Ltd	5.58%	13.41%	0.37	83	0.49	6.29%	7.27%	-1.49%	11.27%	-0.03	-0.13	79	1.0%	1.0%	0.0%	8.23%	0.55	11.18%	2.95%	27
	Hawk Ridge Partners LP	12.24%	11.43%	0.95	35	0.65	8.32%	9.62%	2.33%	6.18%	1.02	0.38	52	1.0%	1.2%	0.2%	9.74%	0.60	10.05%	0.31%	89
	Hawkes Bay Partners	3.02%	9.99%	0.21	89	0.36	4.67%	5.41%	-2.67%	8.40%	-1.46	-0.32	85	1.0%	0.8%	-0.2%	6.22%	0.60	8.94%	2.72%	33
	Heard Opportunity Fund	6.64%	12.78%	0.47	77	0.60	7.74%	8.95%	-2.03%	9.13%	-5.93	-0.22	83	1.0%	1.0%	0.0%	8.41%	0.60	11.43%	3.02%	24
	Hitchwood Capital Fund Ltd	9.59%	13.95%	0.63	68	0.47	6.09%	7.05%	2.55%	12.04%	0.87	0.21	67	1.0%	1.4%	0.4%	11.15%	0.60	12.07%	0.92%	77
	Honeycomb Partners	17.01%	12.74%	1.20	17	0.46	5.99%	6.93%	9.10%	10.69%	2.75	0.85	18	1.0%	1.2%	0.2%	9.79%	0.60	11.20%	1.41%	65
	Hunt Lane Capital	7.25%	16.09%	0.43	79	0.30	3.82%	4.42%	3.01%	15.47%	5.77	0.19	69	1.0%	1.2%	0.2%	9.43%	0.60	12.61%	3.17%	23
	Indus Japan Fund	6.87%	10.97%	0.54	74	0.49	6.34%	7.33%	-0.60%	8.16%	-0.02	-0.07	76	1.0%	0.9%	-0.1%	7.09%	0.60	9.91%	2.82%	31
	Intrinsic Edge Plus	9.53%	8.54%	0.96	34	0.25	3.28%	3.79%	4.78%	7.65%	0.17	0.63	33	1.0%	0.6%	-0.4%	5.08%	0.55	7.17%	2.09%	45
	Ion Israel Fund	13.88%	10.93%	1.13	20	0.51	6.51%	7.53%	5.62%	7.91%	-3.38	0.71	27	1.0%	0.9%	-0.1%	6.97%	0.60	9.88%	2.90%	29
	Jennison Global Healthcare Master Fund, Ltd.	16.75%	14.91%	1.03	30	0.58	7.42%	8.58%	7.69%	12.20%	0.53	0.63	32	1.0%	1.3%	0.4%	10.97%	0.50	11.84%	0.87%	80
	Junto Capital Partners LP	9.82%	3.91%	2.08	1	0.20	2.52%	2.92%	5.55%	2.61%	0.34	2.13	1	1.0%	0.4%	-0.6%	2.87%	0.60	4.02%	1.15%	70
	Kylin Fund	9.82%	13.29%	0.67	62	0.43	5.51%	6.38%	3.26%	11.66%	0.37	0.28	61	1.0%	1.1%	0.1%	9.13%	0.60	11.46%	2.33%	41
	Lakewood Capital Partners, LP	7.14%	18.56%	0.40	82	1.01	12.96%	14.99%	-6.02%	10.94%	-3.49	-0.55	92	1.0%	1.6%	0.6%	12.93%	0.65	16.57%	3.64%	19
	Lasker Fund	20.39%	12.95%	1.40	7	-0.21	-2.75%	-3.18%	21.02%	12.55%	-3.23	1.67	2	1.0%	0.0%	-1.0%	-0.18%	0.60	6.45%	6.63%	5
	Light Street Halogen, L.P.	10.82%	20.16%	0.55	72	0.14	1.82%	2.10%	9.12%	20.05%	1.86	0.45	44	1.0%	1.2%	0.2%	9.63%	0.60	14.01%	4.38%	13
	Lone Cypress	8.69%	15.02%	0.54	73	0.52	6.72%	7.78%	1.22%	12.85%	-4.26	0.09	72	1.0%	1.5%	0.5%	11.97%	0.60	12.98%	1.01%	74
	Long Pond Capital QP Fund, LP	6.51%	25.90%	0.33	85	1.47	18.92%	21.88%	-11.08%	13.85%	0.27	-0.80	94	1.0%	2.5%	1.6%	20.82%	0.60	21.77%	0.95%	76
	Marshall Wace Funds LP - MW Eureka (US) Fund	9.37%	5.99%	1.31	12	0.25	3.28%	3.79%	4.46%	4.64%	-1.10	0.96	14	1.0%	0.6%	-0.3%	5.31%	0.75	6.44%	1.13%	71
	Marshall Wace Funds LP - MW Global Opportunities (US) F	6.52%	7.75%	0.68	58	0.16	2.07%	2.39%	3.17%	7.37%	2.92	0.43	47	1.0%	0.6%	-0.4%	4.94%	0.70	7.31%	2.37%	40
	Marshall Wace Funds LP - MW TOPS (US) Fund	7.70%	5.66%	1.11	22	0.23	2.90%	3.35%	3.28%	4.56%	-0.64	0.72	26	1.0%	0.5%	-0.5%	4.04%	0.65	5.67%	1.63%	56
	Marshall Wace Funds plc - MW Japan Market Neutral Fund	4.62%	2.98%	1.08	25	0.00	0.02%	0.02%	3.22%	2.98%	-0.74	1.08	10	1.0%	0.0%	-1.0%	-0.29%	0.75	3.01%	3.30%	22
	Matrix Capital Management LP	17.83%	20.85%	0.83	46	1.01	12.99%	15.02%	3.86%	14.47%	4.83	0.27	63	1.0%	2.1%	1.1%	17.38%	0.55	17.43%	0.05%	90
	Maverick Fund	13.17%	21.26%	0.62	69	0.52	6.72%	7.77%	6.22%	19.79%	-2.42	0.31	58	1.0%	1.0%	0.1%	8.59%	0.50	15.16%	6.57%	6
	MIG Master Fund, LP	6.58%	13.97%	0.43	80	0.72	9.23%	10.68%	-3.50%	9.00%	0.23	-0.39	87	1.0%	1.4%	0.4%	11.62%	0.60	12.36%	0.74%	83
	Miura Global	9.11%	10.33%	0.77	51	0.29	3.70%	4.28%	4.14%	9.40%	-1.41	0.44	46	1.0%	0.9%	-0.1%	7.29%	0.60	8.88%	1.60%	58

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights					
	5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied	Rank	
	Moon Capital Global Equity Fund	-0.81%	9.95%	-0.17	93	0.20	2.61%	3.02%	-4.34%	9.48%	-4.62	-0.46	91	1.0%	0.3%	-0.7%	2.44%	0.55	7.72%	5.29%	10	
	Naya Fund	16.29%	12.16%	1.20	16	0.60	7.77%	8.99%	6.58%	8.19%	-4.31	0.80	21	1.0%	1.1%	0.1%	8.94%	0.60	10.89%	1.95%	48	
	Newbrook Capital	7.56%	8.67%	0.73	52	0.20	2.54%	2.94%	3.73%	8.16%	2.82	0.46	43	1.0%	0.7%	-0.3%	5.61%	0.60	7.36%	1.75%	52	
	NicHealth Fund LP	17.69%	22.63%	0.78	50	0.84	10.79%	12.48%	6.43%	18.87%	2.05	0.34	56	1.0%	2.2%	1.2%	17.64%	0.60	19.33%	1.69%	55	
	Oxbow Master Fund Limited	19.10%	14.39%	1.20	15	0.63	8.15%	9.43%	8.90%	10.87%	-4.49	0.82	19	1.0%	1.3%	0.3%	10.79%	0.55	12.21%	1.42%	63	
	Palestra Capital Fund, LP	8.67%	12.06%	0.64	67	0.55	7.12%	8.23%	0.39%	8.81%	1.23	0.04	74	1.0%	1.2%	0.2%	10.13%	0.60	10.83%	0.69%	85	
	Pelham Long/Short Fund	4.79%	13.15%	0.32	86	0.61	7.90%	9.14%	-3.93%	9.46%	1.74	-0.42	89	1.0%	1.4%	0.4%	11.13%	0.60	11.74%	0.61%	86	
	PFM Healthcare Fund, LP	7.96%	9.70%	0.70	55	0.34	4.33%	5.01%	-2.34%	8.31%	4.16	0.28	59	1.0%	0.7%	-0.2%	6.13%	0.60	8.65%	2.52%	37	
	Pleid Asia Master Fund	13.67%	10.73%	1.13	21	0.10	1.24%	1.44%	10.82%	10.64%	-0.65	1.02	11	1.0%	0.4%	-0.6%	2.96%	0.60	7.97%	5.02%	11	
	Prince Street International Ltd.	3.20%	11.05%	0.22	88	0.45	5.79%	6.69%	-3.55%	8.79%	1.71	-0.40	88	1.0%	1.0%	0.0%	8.51%	0.60	9.92%	1.41%	64	
	Redmile Capital Fund	10.26%	13.91%	0.68	61	0.31	4.02%	4.65%	5.28%	13.11%	2.39	0.40	50	1.0%	1.0%	0.0%	8.32%	0.60	11.33%	3.01%	26	
	Renaissance Institutional Equities Fund LLC	7.95%	12.71%	0.56	71	0.44	5.74%	6.63%	1.23%	10.84%	-6.06	0.11	71	1.0%	0.5%	-0.4%	4.49%	0.60	11.12%	6.63%	4	
	Rivulet Capital	8.98%	9.75%	0.80	48	0.49	6.33%	7.32%	1.24%	6.44%	0.68	0.19	70	1.0%	0.9%	-0.1%	7.34%	0.60	8.87%	1.54%	61	
	Rockhampton Fund	4.72%	3.61%	0.93	38	0.10	1.31%	1.51%	2.00%	3.28%	0.21	0.61	37	1.0%	0.2%	-0.8%	1.73%	0.60	3.60%	1.88%	50	
	Samlyn Onshore Fund, L.P.	10.66%	9.33%	0.99	32	0.49	6.32%	7.31%	2.76%	5.80%	-1.32	0.48	41	1.0%	1.1%	0.1%	8.60%	0.70	9.06%	0.46%	88	
	Scopus Partners LP	8.92%	11.65%	0.68	60	0.55	7.09%	8.20%	0.60%	8.27%	-1.59	0.07	73	1.0%	1.2%	0.2%	9.49%	0.60	10.48%	0.99%	75	
	Sector Healthcare Fund	-0.84%	3.82%	-0.55	94	0.03	0.43%	0.50%	-2.55%	3.79%	-0.21	-0.67	93	1.0%	0.0%	-1.0%	0.31%	0.60	3.32%	3.01%	25	
	SEG Partners Fund	17.72%	10.93%	1.44	6	0.52	6.65%	7.69%	8.84%	7.77%	-5.29	1.14	9	1.0%	1.0%	0.0%	8.27%	0.60	9.88%	1.61%	57	
56	Seiga Master Fund	8.99%	8.93%	0.86	44	0.19	2.43%	2.81%	5.20%	8.47%	-0.83	0.61	35	1.0%	0.6%	-0.4%	4.99%	0.55	7.05%	2.06%	46	
	Shellback Capital, LP	18.25%	13.00%	1.26	13	0.66	8.47%	9.79%	7.63%	8.55%	3.53	0.89	16	1.0%	1.2%	0.2%	10.10%	0.60	11.57%	1.47%	62	
	SIR Hedged Equity Fund	7.89%	4.64%	1.38	9	-0.01	-0.09%	-0.10%	6.48%	4.63%	1.02	1.40	4	1.0%	0.1%	-0.9%	0.76%	0.65	3.71%	2.95%	28	
	Sirios Capital Partners, L.P	6.22%	8.60%	0.59	70	0.50	6.38%	7.38%	-1.49%	4.41%	-0.31	-0.34	86	1.0%	0.7%	-0.2%	6.07%	0.50	7.25%	1.18%	69	
	Snow Lake China Fund	0.39%	17.22%	0.03	92	0.24	3.04%	3.51%	-2.61%	16.86%	7.34	-0.16	80	1.0%	0.3%	-0.6%	2.82%	0.65	13.75%	10.93%	1	
	SRS Partners, Ltd	13.32%	17.96%	0.71	53	0.19	2.46%	2.85%	10.25%	17.73%	-1.34	0.58	40	1.0%	0.6%	-0.4%	4.98%	0.60	13.05%	8.07%	2	
	Suvretta Partners, LP	9.35%	12.02%	0.69	56	0.48	6.13%	7.08%	2.03%	9.71%	2.20	0.21	68	1.0%	1.3%	0.3%	10.47%	0.65	11.18%	0.71%	84	
	Sylebra Bell Fund	6.57%	22.04%	0.34	84	0.15	1.96%	2.26%	5.45%	21.92%	2.24	0.25	64	1.0%	1.2%	0.2%	9.88%	0.60	15.22%	5.34%	9	
	The Adelphi Europe Fund	8.53%	9.33%	0.78	49	0.29	3.72%	4.31%	3.47%	8.28%	0.26	0.42	48	1.0%	0.7%	-0.3%	5.80%	0.60	8.23%	2.42%	39	
	Tiger Global L.P.	21.28%	17.12%	1.14	19	0.67	8.62%	9.97%	10.68%	13.92%	-0.19	0.77	24	1.0%	1.8%	0.8%	14.75%	0.70	16.29%	1.54%	60	
	Tiger Global, Ltd.	24.05%	16.18%	1.34	10	0.70	8.99%	10.39%	12.45%	12.41%	-0.25	1.00	12	1.0%	1.8%	0.8%	14.39%	0.70	15.47%	1.08%	73	
	Tosca	8.10%	19.20%	0.44	78	0.81	10.46%	12.09%	-2.39%	14.91%	-6.83	-0.16	81	1.0%	1.6%	0.6%	13.28%	0.50	15.24%	1.95%	49	
	Trivest Asset Limited China Focus Fund	26.19%	14.52%	1.60	3	0.41	5.26%	6.08%	17.75%	13.19%	0.57	1.35	5	1.0%	1.0%	0.0%	8.05%	0.55	11.54%	3.49%	21	
	Turiya Fund LP	8.88%	11.42%	0.69	57	0.22	2.88%	3.33%	4.86%	10.92%	-1.17	0.45	45	1.0%	0.4%	-0.6%	3.49%	0.65	9.79%	6.30%	8	
	Valiant Capital Partners	4.81%	16.15%	0.29	87	-0.15	-1.94%	-2.24%	6.67%	15.99%	6.57	0.42	49	1.0%	0.3%	-0.7%	2.70%	0.60	9.05%	6.36%	7	
	Valley Forge Capital, LP	25.73%	17.78%	1.31	11	0.88	11.35%	13.13%	11.61%	11.99%	3.35	0.97	13	1.0%	1.7%	0.7%	14.07%	0.55	14.97%	0.90%	78	
	Viking Global Equities III, Ltd	11.18%	9.02%	1.08	27	0.36	4.65%	5.38%	4.92%	7.24%	3.10	0.68	29	1.0%	0.9%	-0.1%	7.38%	0.70	8.95%	1.57%	59	
	Vista Public Strategies Fund, LP	12.65%	13.16%	0.87	43	0.48	6.18%	7.14%	5.13%	11.05%	-1.37	0.46	42	1.0%	1.3%	0.3%	10.23%	0.60	11.54%	1.31%	66	
	Whale Rock Flagship Fund	19.88%	20.32%	0.93	36	0.56	7.20%	8.32%	11.55%	18.54%	-4.13	0.62	34	1.0%	1.8%	0.8%	15.00%	0.60	16.71%	1.71%	53	
30	Woodline Fund LP	6.48%	3.63%	1.39	8	0.04	0.47%	0.54%	4.55%	3.59%	0.77	1.27	8	1.0%	0.1%	-0.9%	0.97%	0.70	3.58%	2.62%	35	
	Yiheng Capital Management LP	13.73%	21.04%	0.66	65	0.75	9.65%	11.16%	3.86%	17.83%	4.62	0.22	66	1.0%	1.6%	0.6%	13.05%	0.55	17.04%	4.00%	15	
	Zebedee Focus Fund	5.61%	6.35%	0.68	59	0.16	2.01%	2.32%	2.26%	5.91%	4.17	0.38	51	1.0%	0.2%	-0.7%	1.97%	0.60	5.65%	3.69%	17	
	ZP Utility Fund	11.22%	8.37%	1.16	18	0.35	4.56%	5.27%	4.99%	6.50%	1.02	0.77	23	1.0%	0.7%	-0.3%	5.71%	0.60	7.72%	2.01%	47	
	Group Average	10.94%	12.71%	0.82		0.44	5.71%	6.60%	4.02%	10.30%	0.22	0.44							No. Fund:	94		
	HFRI Equity Hedge (Total) Index	9.51%	9.76%	1.02		0.62	7.94%	9.18%	0.08%	3.32%	-0.54	0.02										
	MSCI EAFE - Net	9.55%	14.83%	0.60		0.95	12.27%	14.18%	-3.73%	4.34%	0.41	-0.86										
	MSCI EMF (Emerging Markets Free) - Net	9.87%	16.63%	0.57		0.95	12.19%	14.09%	-3.06%	8.82%	-1.14	-0.35										
	Russell 3000 Index	17.97%	15.96%	1.04		1.05	13.58%	15.71%	2.56%	2.82%	-0.06	0.91										
	S&P 500	18.48%	15.39%	1.10		1.01	13.05%	15.09%	3.46%	3.00%	-0.07	1.15										
	MSCI AC World Index Free - Net	14.40%	14.84%	1.04																		
	Livor3Month	1.34%	0.27%																			

5 Years ending December 31, 2021																					
Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights						
	Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank	
Aberdeen Standard GARS	2.04%	3.91%	0.20	32	0.18	2.37%	2.75%	-1.68%	2.78%	-0.35	-0.60	42	2.2%	1.1%	-1.1%	4.04%	0.45	3.61%	-0.44%	23	
Andurand Commodities Fund	11.63%	35.11%	0.42	17	-0.49	-6.30%	-7.28%	21.24%	34.34%	26.39	0.62	12	2.2%	-0.8%	-3.0%	-3.16%	0.55	15.42%	18.58%	1	
Autonomy Global Macro Fund	-3.24%	19.92%	-0.13	42	0.64	8.27%	9.56%	-11.03%	17.47%	-3.23	-0.63	45	2.2%	5.5%	3.3%	20.36%	0.65	17.66%	-2.70%	31	
48 Brevan Howard Alpha Strategies Fund	10.25%	6.60%	1.31	2	-0.10	-1.25%	-1.44%	9.96%	6.44%	5.29	1.55	2	2.2%	0.0%	-2.2%	-0.02%	0.80	5.08%	5.09%	5	
Brevan Howard AS Macro Fund	3.72%	8.26%	0.32	23	-0.08	-1.02%	-1.17%	3.70%	8.18%	5.09	0.45	16	2.2%	1.0%	-1.2%	3.58%	0.60	4.98%	1.40%	13	
39 Brevan Howard FG Macro Fund	6.45%	14.18%	0.41	18	-0.41	-5.35%	-6.18%	11.35%	12.76%	12.94	0.89	7	2.2%	-0.6%	-2.8%	-2.41%	0.70	6.10%	8.51%	2	
Brevan Howard Fund Limited	8.44%	10.08%	0.72	9	-0.26	-3.33%	-3.85%	10.70%	9.31%	9.83	1.15	5	2.2%	-0.6%	-2.8%	-2.16%	0.60	4.11%	6.27%	3	
44 Brevan Howard MB Macro Fund Limited	5.77%	4.84%	0.91	6	-0.09	-1.13%	-1.31%	5.57%	4.66%	4.49	1.20	4	2.2%	0.3%	-1.9%	1.00%	0.70	3.26%	2.26%	10	
Brevan Howard Multi-Strategy Fund Limited	5.32%	7.65%	0.54	14	-0.14	-1.83%	-2.12%	6.03%	7.35%	7.53	0.82	9	2.2%	0.1%	-2.1%	0.43%	0.55	3.57%	3.14%	7	
Bridgewater Optimal Portfolio	3.49%	8.37%	0.29	25	0.40	5.12%	5.92%	-2.81%	5.92%	-3.21	-0.47	39	2.2%	2.4%	0.3%	9.07%	0.60	7.75%	-1.32%	24	
Bridgewater Pure Alpha Major Markets, LLC	2.26%	8.21%	0.15	36	0.17	2.21%	2.55%	-1.04%	7.81%	1.80	-0.13	27	2.2%	1.7%	-0.4%	6.46%	0.65	7.31%	0.85%	19	
Bridgewater Pure Alpha Trading Company Ltd.	1.78%	8.95%	0.09	40	0.28	3.62%	4.19%	-2.90%	7.91%	-2.08	-0.37	30	2.2%	2.4%	0.2%	9.00%	0.70	8.73%	-0.27%	22	
Broad Reach Master Fund	9.66%	18.11%	0.53	15	0.85	10.98%	12.70%	-1.68%	12.91%	-4.18	-0.13	26	2.2%	7.1%	5.0%	26.57%	0.60	15.88%	-10.69%	46	
Castle Hook	12.98%	17.96%	0.69	11	0.77	9.94%	11.49%	2.22%	13.81%	1.88	0.16	19	2.2%	6.7%	4.5%	25.02%	0.60	15.71%	-9.31%	44	
Caxton Global Investments Limited	9.99%	8.22%	1.04	4	0.14	1.78%	2.06%	6.72%	7.95%	6.27	0.85	8	2.2%	2.4%	0.2%	8.93%	0.65	7.12%	-1.81%	27	
Complus Asia Macro Fund	4.72%	3.50%	0.96	5	0.01	0.17%	0.20%	3.17%	3.49%	0.73	0.91	6	2.2%	0.7%	-1.5%	2.62%	0.60	2.97%	0.35%	21	
DE Shaw Oculus Fund	12.50%	6.12%	1.75	1	0.04	0.45%	0.53%	10.22%	6.10%	2.73	1.68	1	2.2%	0.6%	-1.6%	2.23%	0.70	5.33%	3.11%	8	
Discovery Global Opportunity Fund, Ltd.	2.11%	22.99%	0.15	37	0.81	10.46%	12.10%	-7.42%	19.54%	5.48	-0.38	31	2.2%	6.9%	4.8%	25.87%	0.60	19.51%	-6.36%	43	
Eisler Capital Fund LP	3.25%	3.27%	0.59	13	0.01	0.09%	0.10%	1.83%	3.26%	1.85	0.56	14	2.2%	0.5%	-1.7%	1.72%	0.60	2.78%	1.06%	17	
Element Capital Feeder Fund	8.46%	10.49%	0.70	10	0.09	1.19%	1.37%	6.14%	10.40%	2.49	0.59	13	2.2%	0.9%	-1.3%	3.38%	0.65	8.32%	4.93%	6	
EMSO	2.50%	6.48%	0.21	30	0.31	4.01%	4.64%	-2.78%	4.52%	-1.35	-0.62	44	2.2%	2.4%	0.2%	8.89%	0.60	6.17%	-2.73%	32	
EMSO Saguaro Ltd.	2.50%	6.64%	0.21	31	0.32	4.07%	4.71%	-2.83%	4.68%	-1.67	-0.60	43	2.2%	2.4%	0.2%	9.02%	0.55	6.07%	-2.96%	33	
Gavea Master Fund Ltd.	2.69%	4.32%	0.33	22	-0.02	-0.20%	-0.23%	1.63%	4.32%	1.50	0.38	17	2.2%	0.6%	-1.5%	2.36%	0.60	3.21%	0.85%	18	
Glen Point Global Macro Fund Limited	3.08%	13.50%	0.19	33	0.43	5.58%	6.45%	-3.16%	11.86%	1.52	-0.27	29	2.2%	4.4%	2.2%	16.35%	0.65	12.21%	-4.14%	39	
Graham Absolute Return Trading Ltd.	1.84%	9.06%	0.10	39	0.36	4.62%	5.34%	-3.85%	7.32%	-3.63	-0.53	40	2.2%	3.2%	1.0%	11.97%	0.65	8.61%	-3.36%	37	
Graham - Absolute Return TT Capped Beta SP	-4.79%	11.31%	-0.50	46	-0.05	-0.68%	-0.79%	-4.90%	11.28%	2.78	-0.43	34	2.2%	1.1%	-1.1%	4.08%	0.55	6.50%	2.43%	9	
Graham - Discretionary Enhanced Vol Segregated Portfolio	0.43%	9.90%	-0.04	41	0.32	4.12%	4.77%	-4.66%	8.67%	-3.00	-0.54	41	2.2%	3.5%	1.3%	12.89%	0.65	9.16%	-3.73%	38	
Graham - Discretionary Segregated Portfolio	0.39%	4.97%	-0.16	43	0.16	2.08%	2.41%	-2.97%	4.34%	-1.49	-0.68	46	2.2%	1.7%	-0.4%	6.46%	0.65	4.98%	-1.48%	25	
Graticule Asia Macro Fund Ltd	2.78%	7.23%	0.23	29	0.30	3.82%	4.42%	-2.26%	5.73%	-0.92	-0.39	32	2.2%	2.7%	0.5%	9.91%	0.60	6.76%	-3.15%	35	
GSAM Global Opportunities Fund	2.43%	11.69%	0.15	35	0.46	5.95%	6.88%	-4.37%	9.46%	-1.50	-0.46	37	2.2%	3.6%	1.4%	13.41%	0.60	10.43%	-2.99%	34	
H2O Force 10	2.00%	18.53%	0.13	38	0.70	9.07%	10.48%	-6.86%	15.28%	-6.44	-0.45	36	2.2%	5.2%	3.0%	19.25%	0.45	13.72%	-5.53%	41	
M&G Episode	3.99%	8.44%	0.35	21	0.42	5.43%	6.28%	-2.66%	5.65%	2.39	-0.47	38	2.2%	2.8%	0.6%	10.47%	0.50	7.22%	-3.24%	36	
51 Maniyar Macro Fund	2.31%	7.42%	0.16	34	-0.16	-2.12%	-2.46%	3.41%	7.01%	0.45	0.49	15	2.2%	-0.5%	-2.7%	-1.88%	0.60	3.54%	5.42%	4	
MKP Opportunity Partners, LP	2.97%	4.89%	0.35	20	0.04	0.53%	0.62%	1.17%	4.85%	-0.33	0.24	18	2.2%	0.8%	-1.4%	2.99%	0.65	4.27%	1.29%	15	
MLM Macro - Peak	4.64%	17.21%	0.27	27	0.55	7.10%	8.22%	-2.72%	15.12%	1.48	-0.18	28	2.2%	5.9%	3.7%	21.93%	0.45	12.33%	-9.60%	45	
57 Modular Asian Macro Fund	3.77%	3.11%	0.78	7	0.02	0.21%	0.24%	2.21%	3.10%	0.70	0.71	11	2.2%	0.3%	-1.9%	0.96%	0.70	3.07%	2.11%	12	
41 Navik Capital	0.86%	2.03%	-0.22	44	-0.02	-0.24%	-0.28%	-0.20%	2.01%	0.88	-0.10	24	2.2%	0.2%	-2.0%	0.75%	0.70	2.00%	1.25%	16	
NWI	3.67%	12.07%	0.25	28	0.53	6.81%	7.87%	-3.98%	9.14%	-3.53	-0.43	35	2.2%	4.4%	2.2%	16.43%	0.55	10.36%	-6.07%	42	
Pharo Gaia Fund, Ltd.	6.99%	11.91%	0.52	16	0.43	5.60%	6.48%	0.40%	10.00%	-2.09	0.04	21	2.2%	3.7%	1.6%	13.94%	0.70	11.52%	-2.43%	29	
Pharo Macro Fund, Ltd.	4.64%	8.86%	0.41	19	0.31	4.03%	4.66%	-0.54%	7.53%	-0.96	-0.07	23	2.2%	2.9%	0.8%	10.99%	0.75	9.11%	-1.88%	28	
Rhicon Strategic Program	-0.35%	5.20%	-0.30	45	-0.07	-0.93%	-1.08%	-0.58%	5.09%	1.17	-0.11	25	2.2%	0.2%	-2.0%	0.74%	0.55	2.94%	2.19%	11	
36 Southern Ridges Macro Fund	3.01%	2.29%	0.73	8	-0.01	-0.16%	-0.19%	1.84%	2.28%	2.15	0.80	10	2.2%	0.2%	-2.0%	0.72%	0.60	2.02%	1.30%	14	
Spinnaker Global Emerging Markets Fund Ltd.	3.96%	11.36%	0.29	26	0.51	6.54%	7.56%	-3.50%	8.47%	-3.93	-0.41	33	2.2%	4.0%	1.9%	15.09%	0.55	9.81%	-5.28%	40	
Trend	3.50%	7.81%	0.31	24	0.17	2.24%	2.60%	0.10%	7.37%	0.29	0.01	22	2.2%	2.3%	0.1%	8.41%	0.60	6.69%	-1.73%	26	
Tudor BVI Global Portfolio	7.95%	4.97%	1.30	3	0.02	0.31%	0.36%	6.15%	4.95%	3.29	1.24	3	2.2%	1.0%	-1.2%	3.62%	0.65	4.19%	0.57%	20	
Western Asset Macro Opportunities	7.24%	9.24%	0.66	12	0.43	5.54%	6.40%	0.40%	6.66%	-0.61	0.06	20	2.2%	2.8%	0.6%	10.29%	0.50	7.81%	-2.49%	30	
Group Average	4.27%	9.72%	0.40		0.20	2.60%	3.01%	0.76%	8.46%	1.50	0.13								No. Funds	46	
HFRI Macro: Discretionary Thematic Index	4.21%	4.72%	0.92		0.19	2.40%	2.77%	0.44%	3.82%	2.16	0.12										
MSCI AC World Index Free - Net	14.40%	14.84%	1.04																		
Libor3Month	1.34%	0.27%																			

5 Years ending December 31, 2021																					
Return	Risk	Sharpe Ratio	Sharpe Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank		
ADG Systematic Macro Fund	0.83%	7.92%	-0.02	36	0.02	0.26%	0.30%	-0.46%	7.92%	0.09	-0.06	26	2.4%	0.0%	-2.4%	-0.13%	0.70	6.48%	6.61%	1	
AHL Alpha (Cayman) Limited	5.10%	8.20%	0.49	8	0.01	0.07%	0.08%	3.92%	8.20%	2.85	0.48	6	2.4%	2.3%	-0.1%	7.68%	0.60	5.73%	-1.95%	30	
AHL Dimension	3.00%	5.61%	0.32	13	0.07	0.95%	1.10%	0.81%	5.50%	-2.43	0.15	20	2.4%	1.3%	-1.1%	4.33%	0.60	4.70%	0.37%	17	
AHL Evolution	10.33%	8.33%	1.07	2	0.11	1.37%	1.59%	7.46%	8.17%	0.40	0.91	2	2.4%	1.9%	-0.5%	6.46%	0.70	7.40%	0.95%	16	
AHL Evolution Frontier	12.67%	11.15%	1.01	3	0.17	2.16%	2.50%	9.04%	10.86%	-2.04	0.83	3	2.4%	2.3%	0.0%	7.98%	0.55	8.18%	0.20%	19	
AlphaQuest Original	2.31%	16.46%	0.14	28	-0.14	-1.83%	-2.12%	4.14%	16.32%	2.86	0.25	12	2.4%	3.1%	0.7%	10.39%	0.55	8.51%	-1.89%	29	
AQR Managed Futures	-2.13%	9.78%	-0.31	41	-0.07	-0.86%	-1.00%	-2.11%	9.73%	1.48	-0.22	29	2.4%	2.2%	-0.2%	7.40%	0.55	5.53%	-1.87%	28	
ASG Managed Futures Fund	4.19%	11.24%	0.30	15	0.10	1.32%	1.53%	2.04%	11.13%	3.97	0.18	16	2.4%	3.0%	0.7%	10.37%	0.55	7.77%	-2.60%	35	
54 Aspect Core Trend HV Fund, Ltd.	1.23%	13.08%	0.06	32	0.10	1.26%	1.46%	-0.56%	13.00%	0.79	-0.04	25	2.4%	3.5%	1.2%	12.07%	0.55	8.76%	-3.31%	38	
Aspect Diversified Fund	2.52%	13.52%	0.15	25	0.18	2.34%	2.71%	-0.35%	13.24%	-2.02	-0.03	24	2.4%	3.7%	1.3%	12.58%	0.60	10.28%	-2.30%	33	
BH-DG Systematic Trading Master Fund Limited	6.79%	12.83%	0.47	9	0.05	0.66%	0.76%	5.38%	12.80%	5.86	0.42	7	2.4%	3.4%	1.0%	11.48%	0.60	8.88%	-2.60%	34	
Campbell Global Assets Fund Limited – Class A Shares	5.21%	11.58%	0.38	12	0.15	1.97%	2.27%	2.40%	11.35%	-0.46	0.21	13	2.4%	3.3%	1.0%	11.35%	0.55	8.32%	-3.03%	36	
CCP Core Macro Fund LP	7.08%	10.30%	0.59	5	0.36	4.62%	5.34%	1.29%	8.81%	-0.26	0.15	19	2.4%	2.8%	0.4%	9.52%	0.65	9.59%	0.06%	21	
Crabel Advanced Trend	3.42%	14.92%	0.21	19	0.02	0.31%	0.35%	2.81%	14.92%	5.58	0.19	15	2.4%	4.0%	1.6%	13.55%	0.60	9.92%	-3.63%	39	
Crabel Fund, LP.	2.94%	6.73%	0.27	17	0.05	0.68%	0.78%	1.09%	6.68%	0.62	0.16	17	2.4%	1.1%	-1.3%	3.78%	0.65	5.56%	1.78%	11	
Crabel Gemini 1X	4.12%	6.48%	0.45	10	0.05	0.65%	0.76%	2.25%	6.44%	2.04	0.35	9	2.4%	1.1%	-1.3%	3.81%	0.60	5.06%	1.25%	14	
FORT Global Contrarian Fund	2.42%	8.11%	0.17	22	0.26	3.37%	3.90%	-2.08%	7.12%	-1.85	-0.29	31	2.4%	1.4%	-0.9%	4.89%	0.60	7.29%	2.41%	10	
Fort Global Diversified	1.41%	8.88%	0.05	33	0.27	3.51%	4.06%	-3.15%	7.89%	-5.25	-0.40	35	2.4%	1.2%	-1.2%	4.17%	0.60	7.85%	3.68%	7	
GMO Systematic Global Macro Fund	2.24%	6.87%	0.16	23	0.12	1.51%	1.75%	-0.44%	6.65%	3.04	-0.07	27	2.4%	0.4%	-1.9%	1.47%	0.50	5.10%	3.63%	9	
Graham - K4D-10V Segregated Portfolio	1.67%	10.64%	0.08	31	0.37	4.74%	5.48%	-4.00%	9.12%	-1.73	-0.44	38	2.4%	2.7%	0.3%	9.08%	0.60	9.41%	0.33%	18	
Graham - Proprietary Matrix Segregated Portfolio	2.80%	11.54%	0.18	21	0.50	6.41%	7.42%	-4.52%	8.84%	-3.69	-0.51	41	2.4%	2.1%	-0.3%	7.13%	0.65	10.81%	3.68%	6	
Graham - Tactical Trend Capped Beta (Equities) Segregated	-5.40%	11.44%	-0.54	42	-0.02	-0.24%	-0.28%	-5.98%	11.44%	2.37	-0.52	42	2.4%	2.5%	0.1%	8.51%	0.60	7.46%	-1.06%	24	
Graham - Tactical Trend Segregated Portfolio	2.85%	11.99%	0.18	20	0.35	4.57%	5.29%	-2.53%	10.76%	-0.88	-0.24	30	2.4%	3.3%	0.9%	11.15%	0.60	10.28%	-0.87%	23	
ISAM Systematic	7.16%	17.66%	0.41	11	0.15	1.97%	2.28%	5.12%	17.51%	1.85	0.29	10	2.4%	4.9%	2.6%	16.78%	0.50	10.84%	-5.94%	42	
Kaiser Trading Fund	-0.01%	16.57%	0.00	34	0.00	0.05%	0.06%	-0.05%	16.57%	-5.11	0.00	23	2.4%	4.1%	1.7%	13.89%	0.50	9.08%	-4.81%	41	
Lynx (Bermuda) Ltd.	4.47%	15.11%	0.28	16	0.38	4.96%	5.73%	-0.93%	13.98%	0.48	-0.07	28	2.4%	4.4%	2.0%	14.81%	0.65	13.17%	-1.64%	27	
Millburn Diversified Program	1.85%	10.35%	0.10	30	0.36	4.63%	5.35%	-3.72%	8.86%	-4.76	-0.42	36	2.4%	1.6%	-0.8%	5.47%	0.70	10.07%	4.59%	4	
Millburn Multi-Markets	2.28%	11.79%	0.14	26	0.40	5.15%	5.96%	-3.68%	10.18%	-5.57	-0.36	33	2.4%	1.6%	-0.8%	5.54%	0.55	9.82%	4.27%	5	
26 One River Systematic Alternatives Markets Trend Strategy	4.20%	5.01%	0.58	6	0.01	0.11%	0.12%	2.80%	5.00%	0.71	0.56	4	2.4%	0.5%	-1.8%	1.81%	0.55	3.58%	1.78%	12	
One River Systematic Trend Strategy	2.67%	14.47%	0.16	24	0.08	1.05%	1.22%	1.26%	14.42%	2.21	0.09	21	2.4%	3.8%	1.4%	13.03%	0.55	9.40%	-3.63%	40	
PGIM Wadhvani Trend Plus Strategy	8.30%	10.89%	0.67	4	0.27	3.52%	4.07%	3.62%	10.10%	1.82	0.36	8	2.4%	2.7%	0.3%	9.11%	0.55	8.67%	-0.44%	22	
QMS Diversified Global Macro	-1.80%	10.96%	-0.23	40	0.08	1.08%	1.25%	-3.66%	10.89%	-1.48	-0.34	32	2.4%	1.0%	-1.4%	3.29%	0.50	6.93%	3.64%	8	
Quantitative Global Fund	-1.70%	10.92%	-0.22	39	0.18	2.31%	2.68%	-4.84%	10.58%	-3.45	-0.46	39	2.4%	0.8%	-1.6%	2.61%	0.55	8.13%	5.53%	3	
RG Niederhoffer Diversified Fund	2.03%	21.55%	0.14	27	-0.20	-2.51%	-2.91%	5.54%	21.35%	2.23	0.26	11	2.4%	2.8%	0.4%	9.58%	0.50	9.75%	0.17%	20	
ROW Diversified Fund	1.95%	9.25%	0.11	29	-0.06	-0.81%	-0.94%	1.86%	9.21%	2.07	0.20	14	2.4%	1.9%	-0.5%	6.44%	0.55	5.28%	-1.16%	25	
Synergy Fund Limited	1.00%	8.17%	0.00	35	0.22	2.88%	3.33%	-2.98%	7.47%	-4.14	-0.40	34	2.4%	1.7%	-0.7%	5.75%	0.55	6.80%	1.05%	15	
Systematica Alternative Markets Fund	14.61%	11.10%	1.17	1	0.13	1.62%	1.87%	11.32%	10.94%	0.45	1.03	1	2.4%	2.7%	0.3%	9.14%	0.55	7.86%	-1.28%	26	
Systematica BlueTrend Fund Limited	3.71%	13.78%	0.24	18	0.09	1.17%	1.36%	2.03%	13.71%	4.41	0.15	18	2.4%	3.9%	1.6%	13.43%	0.70	11.15%	-2.29%	32	
Transrend Diversified Fund	4.58%	12.65%	0.31	14	0.22	2.84%	3.28%	1.01%	12.21%	-2.88	0.08	22	2.4%	3.5%	1.1%	11.95%	0.60	9.99%	-1.95%	31	
Two Sigma Compass Cayman Fund, Ltd.	-0.81%	8.31%	-0.22	38	0.17	2.17%	2.51%	-4.04%	7.92%	-2.20	-0.51	40	2.4%	0.3%	-2.1%	0.98%	0.60	6.97%	6.00%	2	
Welton Global Directional Portfolio	7.35%	12.68%	0.52	7	0.02	0.21%	0.24%	6.36%	12.68%	5.49	0.50	5	2.4%	3.3%	0.9%	11.06%	0.55	7.87%	-3.19%	37	
Winton Fund Limited	-0.19%	8.48%	-0.14	37	0.18	2.29%	2.65%	-3.52%	8.06%	-7.08	-0.44	37	2.4%	1.9%	-0.5%	6.51%	0.70	7.94%	1.43%	13	
Group Average	3.32%	11.13%	0.23		0.14	1.77%	2.05%	0.71%	10.68%	-0.09	0.05								No. Funds	42	
HFRI Macro: Systematic Diversified Index	2.20%	7.21%	0.34		0.16	2.13%	2.46%	-1.08%	6.78%	0.35	-0.16										
MSCI AC World Index Free - Net	14.40%	14.84%	1.04																		
Livor3Month	1.34%	0.27%																			

		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		Historical Return and Volatility				Breakdown of Historical Return and Risk by Beta and Alpha								Asset vs. Risk Weights			Expected Return and Optimal Weights				
5 Years ending December 31, 2021		Return	Risk	Sharpe Ratio	Sharpe Ratio Rank	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio	Info Ratio Rank	Port. Weights	Risk Weights	Diff	Implied Return	Exp Info Ratio	Exp Return	Expect minus Implied Return	Rank
	AG Super Fund, L.P.	5.31%	9.31%	0.46	26	0.37	4.71%	5.44%	-0.54%	7.56%	-7.08	-0.07	28	2.9%	4.7%	1.8%	13.22%	0.65	8.83%	-4.39%	30
	Alyeska Fund, L.P.	11.20%	9.24%	1.05	16	0.08	1.09%	1.26%	8.62%	9.16%	-1.16	0.94	12	2.9%	2.8%	-0.1%	7.93%	0.65	7.45%	-0.49%	15
	AQR DELTA Fund II, LP	-3.75%	9.82%	-0.48	35	0.29	3.73%	4.31%	-8.51%	8.82%	-6.25	-0.97	35	2.9%	3.7%	0.8%	10.43%	0.60	8.55%	-1.88%	21
	Atlas Global Investments	5.85%	4.15%	1.07	15	0.07	0.96%	1.11%	3.46%	4.00%	2.42	0.86	14	2.9%	0.7%	-2.1%	2.11%	0.55	3.61%	1.49%	6
	BFAM Asian Opportunities Fund, LP	3.05%	10.95%	0.21	32	0.41	5.25%	6.07%	-3.11%	9.11%	-4.42	-0.34	32	2.9%	5.1%	2.3%	14.59%	0.70	10.66%	-3.93%	29
	BG Fund	6.84%	6.50%	0.85	19	0.23	2.90%	3.36%	2.52%	5.56%	-1.68	0.45	20	2.9%	2.9%	0.0%	8.19%	0.60	6.05%	-2.14%	23
53	Boothbay Absolute Return Strategies Enhanced, LP	19.75%	7.27%	2.35	5	0.22	2.86%	3.31%	14.14%	6.48%	2.11	2.18	5	2.9%	2.7%	-0.2%	7.64%	0.70	7.21%	-0.42%	14
	Boothbay Absolute Return Strategies, LP	13.93%	4.75%	2.50	2	0.15	1.91%	2.20%	9.93%	4.21%	1.19	2.36	2	2.9%	1.8%	-1.1%	5.02%	0.70	4.99%	-0.04%	13
28	Boothbay Diversified Alpha Master Fund, LP	8.43%	5.26%	1.32	9	0.13	1.67%	1.94%	5.20%	4.89%	2.61	1.06	9	2.9%	1.8%	-1.0%	5.22%	0.70	5.31%	0.08%	12
	Brunner Multi-Strategy	3.46%	5.33%	0.42	27	0.16	2.03%	2.35%	0.11%	4.78%	0.11	0.02	25	2.9%	1.9%	-1.0%	5.26%	0.55	4.76%	-0.51%	16
	CQS Directional Opportunities Feeder Fund, LP	-1.88%	19.02%	-0.06	34	0.62	7.98%	9.22%	-9.31%	16.63%	-17.33	-0.56	33	2.9%	7.7%	4.8%	21.75%	0.75	18.58%	-3.17%	27
	CQS Diversified Fund (SPC) Limited (Segregated Portfolio A)	3.81%	11.59%	0.27	30	0.47	6.03%	6.98%	-3.04%	9.25%	-9.23	-0.33	31	2.9%	5.9%	3.0%	16.69%	0.70	11.28%	-5.41%	33
	DE Shaw Composite International Fund	13.97%	3.73%	3.19	1	0.05	0.71%	0.82%	11.16%	3.64%	1.20	3.07	1	2.9%	0.9%	-2.0%	2.45%	0.85	4.33%	1.87%	4
	DE Shaw Multi-Asset Fund, L.L.C.	7.05%	2.55%	2.17	6	0.06	0.77%	0.89%	4.74%	2.39%	0.05	1.98	6	2.9%	0.8%	-2.0%	2.40%	0.80	3.19%	0.79%	9
	Double Black Diamond	3.73%	4.71%	0.52	24	0.16	2.12%	2.45%	0.27%	4.02%	-2.00	0.07	23	2.9%	2.0%	-0.9%	5.67%	0.55	4.39%	-1.28%	20
43	ExodusPoint Partners International Fund, Ltd	4.68%	2.66%	1.24	11	0.05	0.63%	0.73%	2.64%	2.56%	0.18	1.03	11	2.9%	0.6%	-2.2%	1.75%	0.80	3.23%	1.47%	7
	Farallon Capital Institutional Investors, LP	7.09%	4.38%	1.29	10	0.20	2.56%	2.96%	3.00%	3.23%	-1.57	0.93	13	2.9%	1.9%	-0.9%	5.48%	0.60	4.41%	-1.07%	19
	GLG Market Neutral Fund	6.35%	6.35%	0.80	20	0.22	2.81%	3.25%	2.15%	5.45%	-3.90	0.40	21	2.9%	3.0%	0.2%	8.60%	0.50	5.37%	-3.23%	28
	HBK Multi-Strategy Offshore Fund Ltd.	5.39%	5.45%	0.75	22	0.21	2.69%	3.11%	1.31%	4.48%	-2.13	0.29	22	2.9%	2.6%	-0.3%	7.37%	0.65	5.47%	-1.89%	22
	Hudson Bay Fund LP	10.45%	3.63%	2.40	4	0.05	0.62%	0.72%	8.07%	3.56%	0.46	2.27	4	2.9%	0.9%	-2.0%	2.48%	0.80	4.02%	1.54%	5
	LIM Asia Multi-Strategy Fund, Inc	3.60%	7.06%	0.35	28	0.28	3.63%	4.19%	-1.28%	5.68%	-0.05	-0.23	29	2.9%	3.2%	0.4%	9.16%	0.60	6.60%	-2.56%	24
	Maso Capital Master Fund	10.19%	21.33%	0.51	25	0.83	10.73%	12.41%	-0.20%	17.35%	-7.15	-0.01	27	2.9%	10.4%	7.6%	29.51%	0.50	16.64%	-12.87%	35
	Millennium	11.56%	3.98%	2.45	3	0.09	1.18%	1.36%	8.52%	3.74%	1.22	2.28	3	2.9%	1.4%	-1.5%	3.96%	0.75	4.35%	0.39%	11
	OConnor Global Multi-Strategy Alpha	10.94%	8.56%	1.11	14	0.35	4.52%	5.23%	4.79%	6.77%	0.70	0.71	16	2.9%	4.1%	1.3%	11.77%	0.50	7.18%	-4.58%	32
	Pacific Alliance Asia Opportunity Fund	5.91%	2.07%	2.15	7	0.04	0.58%	0.67%	3.85%	1.96%	-0.47	1.97	7	2.9%	0.6%	-2.3%	1.69%	0.60	2.32%	0.64%	10
	Pagosa Partners, L.P.	6.11%	4.00%	1.17	12	0.21	2.67%	3.09%	1.94%	2.54%	0.03	0.76	15	2.9%	1.8%	-1.0%	5.13%	0.60	4.08%	-1.05%	18
	Paloma Partners	5.38%	3.79%	1.05	17	0.14	1.77%	2.05%	2.17%	3.19%	-1.87	0.68	17	2.9%	1.7%	-1.2%	4.78%	0.70	4.18%	-0.60%	17
	PIMCO Absolute Return Strategy (PARS)	2.92%	8.23%	0.23	31	0.29	3.74%	4.33%	-1.96%	7.00%	-2.56	-0.28	30	2.9%	3.7%	0.8%	10.40%	0.60	7.47%	-2.92%	26
	Sculptor Domestic Partners II, L.P.	9.56%	8.13%	1.00	18	0.44	5.62%	6.50%	2.37%	4.88%	-0.81	0.49	19	2.9%	3.8%	1.0%	10.91%	0.75	8.19%	-2.72%	25
	Weiss Multi-Strategy Partners	5.22%	5.15%	0.76	21	0.08	1.06%	1.22%	2.81%	5.00%	0.75	0.56	18	2.9%	1.2%	-1.6%	3.42%	0.60	4.47%	1.04%	8
	Wexford Spectrum Fund, LP	4.64%	16.01%	0.28	29	0.89	11.44%	13.23%	-7.27%	9.03%	-3.47	-0.81	34	2.9%	7.8%	4.9%	22.04%	0.45	12.50%	-9.54%	34
	Whitebox Multi-Strategy Fund	5.71%	8.45%	0.55	23	0.33	4.25%	4.92%	0.24%	6.87%	-6.76	0.03	24	2.9%	4.4%	1.5%	12.48%	0.65	8.08%	-4.40%	31
	Group Average	6.76%	7.29%	1.06		0.26	3.29%	3.80%	2.15%	6.06%	-2.09	0.68								No. Funds	32
	HFRI RV: Multi-Strategy Index	4.54%	4.10%	1.13		0.22	2.78%	3.21%	0.34%	2.55%	-1.69	0.13									
MSCI AC World Index Free - Net		14.40%	14.84%	1.04																	
Livor3Month		1.34%	0.27%																		

CW Model Portfolios - Dec 2021

3 Years ending December 31, 2021	Historical Return and Volatility			Breakdown of Historical Return and Risk by Beta and Alpha						
	Return	Risk	Sharpe Ratio	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio
Cliffwater Model Portfolio - Baseline	6.87%	5.58%	1.00	0.28	5.36%	4.78%	0.22%	2.87%	-1.88	0.08
Cliffwater Model Portfolio - Low Risk	5.92%	3.75%	1.17	0.17	3.29%	2.94%	1.09%	2.33%	-1.57	0.47
Cliffwater Model Portfolio - Market Neutral	2.97%	2.30%	0.47	0.10	1.91%	1.70%	-0.83%	1.55%	-1.29	-0.54
Cliffwater Model Portfolio - Credit/Distressed	6.68%	8.76%	0.67	0.38	7.21%	6.43%	-1.34%	5.95%	-4.80	-0.22
Cliffwater Model Portfolio - Event Driven	10.43%	7.05%	1.48	0.38	7.30%	6.51%	3.13%	2.70%	-0.93	1.16
Cliffwater Model Portfolio - Equity Long/Short	9.89%	7.97%	1.17	0.38	7.31%	6.52%	2.04%	4.59%	-0.20	0.45
Cliffwater Model Portfolio - Macro Discretionary	3.79%	5.14%	0.22	0.20	3.78%	3.38%	-2.63%	3.87%	-0.84	-0.68
Cliffwater Model Portfolio - Macro Systematic	8.73%	8.28%	0.53	0.13	2.46%	2.19%	1.94%	7.99%	-1.20	0.24
Cliffwater Model Portfolio - Multi Strategy	6.53%	7.44%	0.64	0.30	5.78%	5.16%	-0.97%	5.35%	-4.78	-0.18
HFRI Fund of Funds Composite Index	8.42%	6.94%	1.25	0.36	6.83%	6.10%	0.53%	3.31%	-1.77	0.16
HFRI FOF: Diversified Index	8.17%	6.45%	1.10	0.32	6.21%	5.54%	0.89%	3.31%	-1.66	0.27
HFRI FOF: Conservative Index	6.77%	5.32%	1.07	0.25	4.81%	4.29%	0.91%	3.14%	-2.47	0.29
MSCI AC World Index Free - Net	20.38%	17.08%	1.28							
Libor3Month	1.01%	0.29%								

5 Years ending December 31, 2021	Return	Risk	Sharpe Ratio	Beta to MSCI ACWI	Beta Return	Beta Risk	Alpha Return	Alpha Risk	Convexity	Info Ratio
Cliffwater Model Portfolio - Baseline	4.63%	4.78%	0.64	0.28	3.62%	4.18%	-0.65%	2.32%	-1.44	-0.28
Cliffwater Model Portfolio - Low Risk	4.21%	3.33%	0.72	0.17	2.24%	2.59%	0.09%	2.10%	-1.01	0.05
Cliffwater Model Portfolio - Market Neutral	3.30%	2.19%	0.49	0.10	1.34%	1.55%	-0.32%	1.54%	-1.18	-0.21
Cliffwater Model Portfolio - Credit/Distressed	5.49%	6.91%	0.62	0.33	4.28%	4.95%	-0.16%	4.82%	-3.87	-0.03
Cliffwater Model Portfolio - Event Driven	5.45%	6.58%	0.82	0.40	5.20%	6.01%	0.04%	2.67%	-0.70	0.02
Cliffwater Model Portfolio - Equity Long/Short	6.30%	6.97%	0.80	0.39	5.08%	5.87%	0.35%	3.76%	-0.11	0.09
Cliffwater Model Portfolio - Macro Discretionary	1.90%	4.60%	-0.23	0.19	2.42%	2.79%	-3.53%	3.66%	-0.05	-0.96
Cliffwater Model Portfolio - Macro Systematic	4.84%	8.86%	0.05	0.21	2.66%	3.08%	-2.28%	8.30%	-0.64	-0.27
Cliffwater Model Portfolio - Multi Strategy	5.21%	5.93%	0.53	0.27	3.43%	3.97%	-0.42%	4.40%	-3.71	-0.09
HFRI Fund of Funds Composite Index	5.68%	5.90%	0.99	0.35	4.55%	5.26%	-0.31%	2.66%	-1.31	-0.12
HFRI FOF: Diversified Index	5.52%	5.53%	0.76	0.32	4.18%	4.83%	-0.10%	2.69%	-1.20	-0.04
HFRI FOF: Conservative Index	4.67%	4.37%	0.77	0.24	3.06%	3.54%	0.19%	2.56%	-1.88	0.07
MSCI AC World Index Free - Net	14.40%	14.84%	1.04							
Libor3Month	1.34%	0.27%								

Explanatory Guide

This report provides information regarding the Cliffwater Hedge Fund Select List and the Cliffwater Hedge Fund Focus List as of the date indicated on the cover page. The Cliffwater Hedge Fund Select List consists of Cliffwater approved hedge funds and the Cliffwater Hedge Fund Focus List consists of Cliffwater A- or B-rated hedge funds.

Within this report, we have only included open-ended commingled hedge funds for which Cliffwater receives performance information. Further, for hedge funds with multiple investment structures (e.g., an onshore fund and an offshore fund), only one of the investment structures is selected for inclusion in the report. Generally, the master fund is selected, if available, and, if the master fund is not available, the onshore fund is selected, unless the offshore fund has a longer track record. Certain hedge funds with track records less than 12 months are not included in the report and, to the extent such a hedge fund is included, a full set of data may not be provided.

The hedge funds included in the report are ordered and color coded by strategy as follows: Market Neutral, purple; Credit/Distressed, orange; Event Driven, blue; Equity Long/Short, yellow; Macro-Discretionary, green; Macro-Systematic (CTA), red; and Multi-strategy, red.

This report also includes information regarding the performance results of the Cliffwater Model Portfolios (both overall and strategy-specific), indexes selected by Cliffwater as representative of the hedge fund strategies, indexes upon which the beta calculations are based, and 3 month Libor. A summary of certain of this information is included in the final table.

At the bottom of the tables, we have included a “Group Average” row. The “Group Average” values are an average of the values for the hedge funds included within the relevant table.

Below please find a description of each column appearing in the tables throughout this report. Unless otherwise indicated, table values are based upon trailing 60 months. Amounts may not sum due to rounding.

<i>Column</i>	<i>Title</i>	<i>Description</i>
1		Number of months used to calculate the table values. If a hedge fund has a track record of less than 60 months, the number of months used in the calculations is shown in column 1. If column 1 is blank, then the fund has a track record of at least 60 months.
2		Name of the hedge fund, benchmark or portfolio.
3	<i>Return</i>	Annualized return of historical monthly returns. The hedge fund returns are net of all fees and fund expenses.
4	<i>Risk</i>	Annualized standard deviation of historical monthly returns.
5	<i>Sharpe Ratio</i>	Return (column 3) minus the 3-month Libor return, divided by Risk (column 4). The Sharpe Ratio is a common measure of risk adjusted return and can be viewed as a hedge fund’s past ability to generate return per unit of risk.
6	<i>Sharpe Ratio Rank</i>	Hedge funds are ranked by their Sharpe Ratio from highest value (best) to lowest value (worst). Evaluating hedge funds on the basis of Sharpe Ratio alone ignores the varying impact of beta on hedge funds. In Cliffwater’s view, investors ideally would want to invest in hedge funds with little or no beta so that the fees they pay are based upon the ability of the hedge fund to generate uncorrelated alpha and not a

result of returns from beta, which can otherwise be obtained at virtually no fee. Columns 7 through 13 strip from the Sharpe Ratio the effects of beta to arrive at an alternative (and, in Cliffwater's opinion, more sophisticated) risk adjusted return called the Information Ratio.

7	<i>Beta</i>	<p>Unless otherwise indicated, Beta is derived from a regression of each return series (less the 3-month Libor return) against the return of the MSCI All Country World Index (MSCI ACWI). With respect to the portion of the report regarding the Credit/Distressed funds on the Cliffwater Hedge Fund Focus List, Beta is derived from a regression of each return series (less the 3-month Libor return) against the return of the S&P/LSTA U.S. Leveraged Loan Index. Please see Index disclosures for a description of the indexes.</p> <p>Beta is used as a measure of systematic risk (beta equal to 1.0).</p>
8	<i>Beta Return</i>	<p>Beta (column 7) multiplied by the return of the index used to calculate the Beta less the 3-month Libor return.</p> <p>Beta Return captures the portion of hedge fund total return that comes from beta.</p>
9	<i>Beta Risk</i>	<p>The absolute value of Beta (column 7) multiplied by the standard deviation of the index used to calculate the Beta.</p> <p>Beta Risk is the component of Risk that is explained by market factors (as represented by the index used to calculate the Beta).</p>
10	<i>Alpha Return</i>	<p>The annualized intercept of the regression (see Beta, above).</p> <p>Alpha Return is the portion of hedge fund total return that comes from alpha.</p>
11	<i>Alpha Risk</i>	<p>The annualized standard deviation of the residuals from the regression (see Beta, above).</p> <p>Alpha Risk is the component of Risk not explained by market factors (as represented by the index used to calculate the Beta).</p>
12	<i>Convexity</i>	<p>Convexity is derived from a regression (quadratic) of each return series (less the 3-month Libor return) against the return of the index used to calculate the Beta.</p> <p>Convexity measures the change in beta as the market moves. For example, negative convexity means that beta declines as the market rises and beta increases as the market falls. Negative convexity is the opposite of what typical investors want. Better to have positive convexity where beta increases as the market rises and beta falls as the market falls.</p>
13	<i>Information Ratio</i>	<p>Alpha Return (column 10) divided by Alpha Risk (column 11).</p> <p>The Information Ratio measures the efficiency of a manager in manufacturing active returns or alpha. It is a preferred measure of active management because, unlike the Sharpe Ratio, it is stripped of all beta return.</p>
14	<i>Information Ratio Rank</i>	Hedge funds are ranked by their Information Ratio from highest value (best) to lowest value (worst).
15	<i>Asset Weight</i>	The hedge funds in each table are equal weighted.

16	<i>Risk Weight</i>	<p>The marginal contribution to risk from the hedge fund to a portfolio comprised of all funds in the table.</p> <p>Risk weighting, as opposed to asset weighting, measures the impact of the individual hedge fund on the risk of the overall portfolio. All other things being equal, a hedge fund with higher risk will have a greater impact on overall portfolio risk than a hedge fund with lower risk. However, an equally important factor in assessing individual hedge fund contribution to overall portfolio risk is its correlation with other hedge funds in the portfolio. A low correlation will reduce hedge fund contribution to overall portfolio risk while a high correlation to other hedge funds will increase its contribution to overall portfolio risk.</p> <p>“Risk neutrality” is a frequently talked about weighting scheme today where individual hedge funds are given equal risk weightings rather than equal asset weightings. The benefit of risk neutral weights (also known as, “risk parity”) is that each hedge fund has the same economic impact on the overall portfolio return, regardless of asset weight. Risk neutral weights avoid a situation where a more volatile hedge fund dominates short term performance or the reverse case where a very low risk hedge fund has little impact on overall portfolio return.</p>
17	<i>Difference</i>	<p>Risk Weight (column 16) minus Asset Weight (column 15).</p> <p>While risk neutrality appeals to an investor’s sense of portfolio balance and diversification, it ignores expected return, which is a key driver behind traditional portfolio optimization. In columns 18 through 22, we show how expected hedge fund return might direct hedge fund weights.</p>
18	<i>Implied Return</i>	<p>“Implied return” is not expected return, but rather the rate of return that the hedge fund, index or portfolio, as applicable, should be earning if its current portfolio asset weight is optimal.¹ In calculating the Implied Return in this report, Cliffwater has used what it believes is the average investor’s risk adjusted return preference.</p>
19	<i>Expected Information Ratio</i>	Expected Information Ratios are based upon Cliffwater analyst estimates as to how individual hedge funds will perform in the future.
20	<i>Expected Return</i>	<p>The sum of the (1) expected 3-month Libor return, (2) expected beta return, and (3) expected alpha return.</p> <ol style="list-style-type: none"> 1. Cliffwater’s long-term forecast for expected 3-month Libor return is shown in the Supplemental Information section; 2. Expected beta return equals Beta (column 7) multiplied by the difference between Cliffwater’s forecasts for the expected return of the index used to calculate the Beta and the expected 3-month Libor return; and 3. Expected alpha return equals Alpha Risk (column 11) multiplied by the Expected Information Ratio (column 19).
21	<i>Expected minus Implied Return</i>	<p>Expected Return (column 21) minus Implied Return (column 18).</p> <p>Hedge funds with expected returns greater than implied returns should be increased in weighting. Conversely, hedge funds with expected returns less than implied returns should have their weighting decreased. As the portfolio weight increases, implied return increases because the marginal contribution to overall risk increases. Portfolio weights are optimal when each hedge fund’s expected return equals its implied return. However, portfolios may remain suboptimal</p>

¹ For a thorough discussion of implied return, read the “Technical Appendix: Portfolio Optimization and Implied Return” in the Cliffwater research report titled, “Constructing a Portfolio of Hedge Funds.”

because investors impose constraints, the most common being a maximum allocation to any individual hedge fund and minimum and maximum constraints on hedge fund strategies.

22	<i>Expected minus Implied Return Rank</i>	Hedge funds are ranked by the difference between their respective expected and implied returns. Higher rankings are given to hedge funds with the greatest positive difference between expected and implied returns and, therefore, are the best candidates to have increases in asset weightings. Low ranking hedge funds are the best candidates to have reduced asset weightings.
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Disclosures

General Disclosures

This report reflects information only through the date indicated on the cover page. All information has been obtained from sources believed to be reliable but its accuracy is not guaranteed. Cliffwater has not conducted an independent verification of the information. The information herein may include inaccuracies or typographical errors. Due to various factors, including the inherent possibility of human or mechanical error, the accuracy, completeness, timeliness and correct sequencing of such information and the results obtained from its use are not guaranteed by Cliffwater. No representation, warranty, or undertaking, express or implied, is given as to the accuracy or completeness of the information or opinions contained in this report. This report is not an advertisement, is being distributed for informational and discussion purposes only, should not be considered investment advice, and should not be construed as an offer or solicitation of an offer for the purchase or sale of any security. The information herein does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. Cliffwater shall not be responsible for investment decisions, damages, or other losses resulting from the use of the information. This report is not intended for public use or distribution. The information contained herein is confidential commercial or financial information, the disclosure of which would cause substantial competitive harm to you, Cliffwater, or the person or entity from whom the information was obtained, and may not be disclosed except as required by applicable law.

The information in this report is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve.

There can be no assurance that any expected rates of return or risk will be achieved. Expected rates of return and risk are subjective determinations by the Cliffwater based on a variety of factors, including, among other things, investment strategy, prior performance of similar strategies, and market conditions. Expected rates of return may be based upon assumptions regarding future events and conditions that prove to be inaccurate. Expected rates of return and risk should not be relied upon as an indication of future performance and should not form the primary basis for an investment decision. No representation or assurance is made that the expected rates of return or risk will be achieved.

Nothing contained in this report is, or shall be relied upon as, a representation as to past or future performance, and no assurance, promise, or representation can be made as to actual returns. Past performance is not indicative of future returns, which may vary. Future returns are not guaranteed, and a loss of principal may occur.

Cliffwater is a service mark of Cliffwater LLC.

Cliffwater Model Portfolios

The performance results presented are unaudited and have been prepared for informational purposes only. The performance results for each strategy-specific Cliffwater Model Portfolio (e.g., Cliffwater Model Portfolio - Market Neutral) reflect the hypothetical, back-tested results of an equal-weighted model portfolio of all Cliffwater approved open-ended commingled hedge funds that use the strategy. The Cliffwater Model Portfolio performance results reflect the hypothetical, back-tested results of a model portfolio of all Cliffwater approved open-ended commingled hedge funds that are weighted to the target strategy weights of the model determined by Cliffwater over time. Closed-ended hedge funds are excluded since they are not available for investment on an ongoing basis. Approved funds are added to the model portfolios the month following the month in which they are approved, and funds are removed from the model portfolios on the month that they are no longer Cliffwater approved funds. However, the historical performance for funds removed from the model portfolios are kept in the historical performance of the model portfolios. For funds with multiple investment structures (e.g., an onshore fund and an offshore fund), the performance results of only one of the investment structures is selected for inclusion in the model portfolios. Generally, the master fund is selected, if available, and, if the master fund is not available, the onshore fund is selected, unless the offshore fund has a longer track record.

The returns are net of (i) underlying fund or account expenses, management fees, and performance-based fees and (ii) Cliffwater's actual fees, determined on the basis of allocation of Cliffwater's compensation to assets under advisement and by strategy.

The hypothetical, back-tested performance results of the model portfolios do not represent actual trading, and may not reflect the impact material economic and market factors might have had on Cliffwater's decision-making if it were actually managing clients' money. The actual performance of Cliffwater's clients may have been materially different from the results portrayed in the model portfolio. The model portfolio includes hedge funds that Cliffwater no longer recommends to its clients. Past performance is not indicative of future returns, which may vary. Future returns are not guaranteed, and a loss of principal may occur.

Index Disclosures

References to market or composite indices (such as the S&P 500), benchmarks or other measures of relative market performance over a specified period of time (each, an "index") are provided for information only. Reference to an index does not imply that a portfolio will achieve returns, volatility or other results similar to the index. The composition of an index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility or tracking error targets, all of which are subject to change over time. Investors cannot invest directly in indices and, unlike an account managed by Cliffwater, an index is unmanaged. Index returns reflect the reinvestment of dividends but do not reflect the deduction of any fees or expenses, which would reduce returns.

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Index Definitions

Bloomberg Barclays U.S. High Yield Index (Barclays High Yield Credit Bond Index) covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

Credit Suisse Event Driven Index (Dow Jones Credit Suisse Event Driven Index) is a global, asset-weighted index of single-manager Event Driven funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

Credit Suisse Fixed Income Arbitrage Index (Dow Jones Credit Suisse Fixed Income Arbitrage Index) is a global, asset-weighted index of single-manager Fixed Income Arbitrage funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

Credit Suisse Global Macro Index (Dow Jones Credit Suisse Global Macro Index) is a global, asset-weighted index of single-manager Global Macro funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

Credit Suisse Hedge Fund Index (Dow Jones Credit Suisse Hedge Fund Index) is a global, asset-weighted index of single-manager funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

Credit Suisse Long-Short Equity Index (Dow Jones Credit Suisse Long-Short Equity Index) is a global, asset-weighted index of single-manager Equity Long/Short funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

Credit Suisse Managed Futures Index (Dow Jones Credit Suisse Managed Futures Index) is a global, asset-weighted index of single-manager Managed Futures funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

Credit Suisse Multi-Strategy Index (Dow Jones Credit Suisse Multi-Strategy Index) is a global, asset-weighted index of single-manager Multi-Strategy funds that report to the Credit Suisse Hedge Fund Database. The index is calculated and rebalanced on a monthly basis.

HFR Equity Hedge (Total) Index is a global, equal-weighted index of single-manager Equity Long/Short funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR ED- Distressed/Restructuring Index is a global, equal-weighted index of single-manager Distressed/Restructuring funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR ED- Merger Arbitrage Index is a global, equal-weighted index of single-manager Merger Arbitrage funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR EH- Equity Market Neutral Index is a global, equal-weighted index of single-manager Equity Market Neutral funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR Event Driven (Total) Index is a global, equal-weighted index of single-manager Event Driven funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR Fund of Funds Composite Index is a global, equal-weighted index of fund of funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR Fund Weighted Composite Index is a global, equal-weighted index of single-manager funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR Macro (Total) Index is a global, equal-weighted index of single-manager Global Macro funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR Macro- Systematic Diversified Index is a global, equal-weighted index of single-manager Systematic Global Macro funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR Relative Value (Total) Index is a global, equal-weighted index of single-manager Relative Value funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

HFR RV: Multi-Strategy Index is a global, equal-weighted index of single-manager Multi-Strategy Relative Value funds that report to the HFR Database. The index is calculated monthly, and revised for up to three months as constituents report monthly returns.

MSCI All Country World Index (MSCI ACWI) is an index that captures large and mid cap representation across 23 developed markets and 23 emerging markets countries. With over 2,400 constituents, the index covers approximately 85% of the global investable equity opportunity set.

MSCI EAFE Index (MSCI EAFE - Net - USD) is an equity index which captures large and mid cap representation across developed markets countries around the world, excluding the United States and Canada. With over 900 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets Index (MSCI EM (EMERGING MARKETS) - Net - USD) captures large and mid cap representation across 23 emerging markets countries. With over 800 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

JP Morgan Corporate Emerging Markets Bond Index Broad Diversified (JPM CEMBI Broad Diversified Index) tracks total returns for U.S.-denominated corporate bonds issued by emerging markets entities.

S&P 500 Index (S&P 500 (TR)) is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

S&P/LSTA U.S. Leveraged Loan Index is a market value-weighted index designed to measure the performance of the institutional leveraged loan market in the United States based upon market weightings, spreads and interest payments, including Term Loan A, Term Loan B and Second Lien tranches.