

FUND FACT SHEET - GROUP WORK

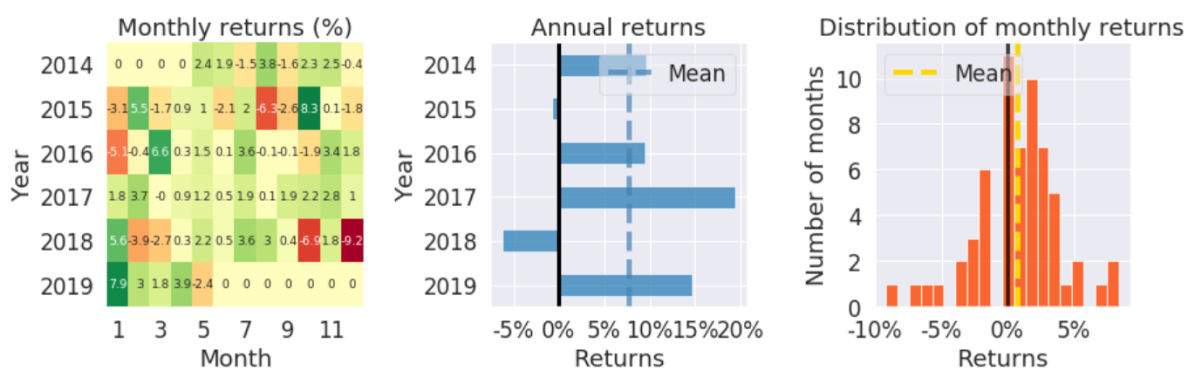
Returns analysis gives us a raw description of an asset value that shows us the power of a factor in real currency values. One of the most basic ways to look at a factor's predictive power is to look at the mean return of different factor quantile.

Start date	2014-05-16
End date	2019-05-16
Total months	59
Backtest	
Annual return	8.9%
Cumulative returns	53.2%
Annual volatility	13.3%
Sharpe ratio	0.71
Calmar ratio	0.45
Stability	0.87
Max drawdown	-19.8%
Omega ratio	1.14
Sortino ratio	0.99
Skew	NaN
Kurtosis	NaN
Tail ratio	0.91
Daily value at risk	-1.6%

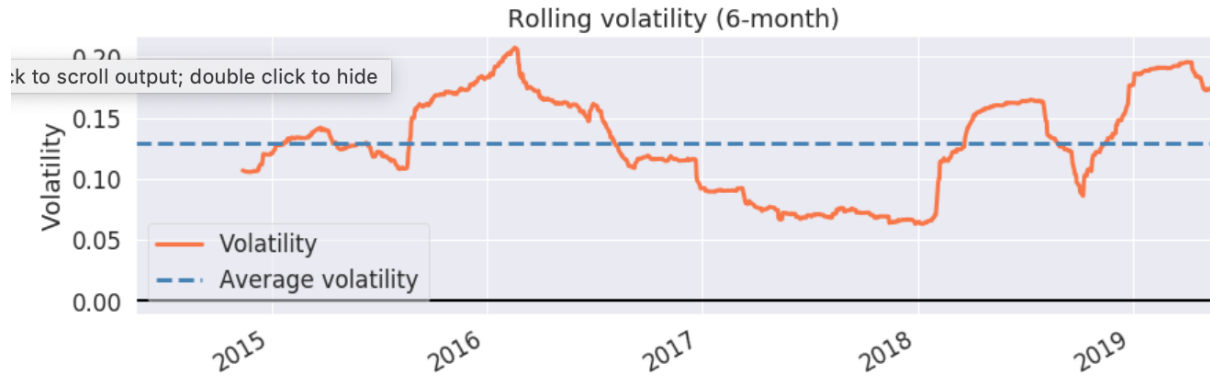
By looking at the mean return by quantile we can get a real look at how well the factor differentiates forward returns across the signal values. Obviously we want stocks with a better signal to exhibit higher returns. For a good factor we'd expect to see negative values in the lower quartiles and positive values in the upper quartiles. Information Analysis is a way for us to evaluate the predictive value of a factor.



This plot shows more information about the underlying data. It gives a better idea about the range of values. What gives the plots their shape is the application of a probability density of the data at different values.



This rolling forward returns spread graph allows us to look at the raw spread in basis points between the top and bottom quantiles over time. The orange line is the returns spread



A series of statistics were created in order to help the decision making process and to understand the behavior of S&P 500 index in the past five years. It is possible to identify some trends as well as the behavior of the whole index throughout time. This is a pretty comprehensive set of statistics – the Sharpe Ratio, Calmar Ratio, Total Returns, CAGR, Max Drawdown, Periodic Returns.

Stats for index from 2014-05-16 00:00:00 - 2019-05-16 00:00:00

Annual risk-free rate considered: 0.00%

Summary:

Total Return	Sharpe	CAGR	Max	Drawdown
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.83%

Annualized Returns:

mtd	3m	6m	ytd	1y	3y	5y	10y	incep.
834.95%	-18.23%	300.09%	4.74%	119.07%	-3.17%	18.30%	18.30%	18.30%

Periodic:

	daily	monthly	yearly
sharpe	-	-0.45	-0.53
mean	inf%	-31571.31%	-61.36%
vol	-	70746.58%	115.76%
skew	-	-7.72	-2.01
kurt	-	59.78	4.09
best	inf%	5272.43%	11.78%
worst	-55622.72%	-158049.66%	-263.85%

Drawdowns:

max	avg	# days
-294.83%	-230.08%	201

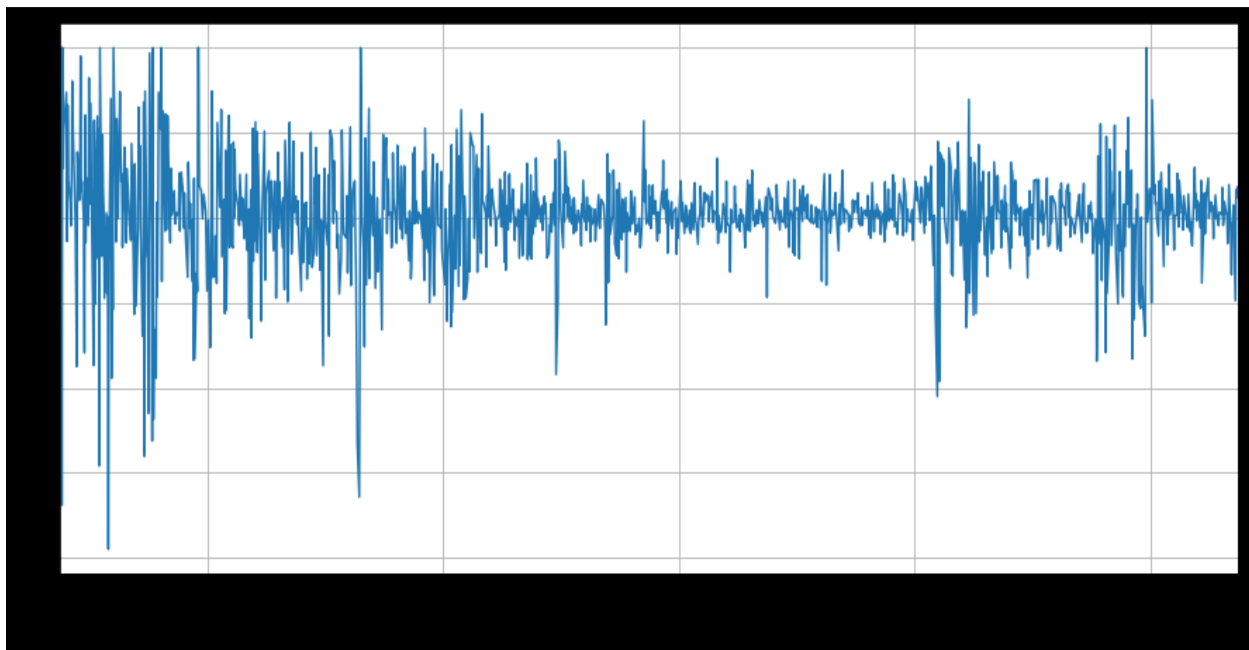
Misc:

avg. up month	676.44%
avg. down month	-3833.63%
up year %	40.00%
12m up %	24.00%

Next we want to represent a table of monthly returns.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Oct	Nov	Dec	YTD						
2014	0	0	0	0	-52.05	-120.19	5272.43	-116.6	-183.9
-521.09	-121.67	305.55	-368.18						
2015	26	-77.25	197.53	15.16	-37.62	-142.07	-185.44	269.43	-327.32
-125.21	-3.51	102.8	-8.72						
2016	-363.07	-132.8	-74.88	148.22	-80.15	-1449.4	-87.97	-245.64	-435.37
-101.53	2070	74.76	-50.73						
2017	-80.81	189.74	-12.54	-15.16	-75.96	-433.33	-147.49	-885.69	-35.24
-74.51	767.26	-163.28	11.78						
2018	-109.43	-2369.15	-224.1	-159.46	-15.97	-111.02	544.08	-97.25	-105.11
-158050	-24.7	3.94	-263.85						
2019	1.24	-132.86	-338.34	-85.87	834.95	0	0	0	0
0	0	0	4.74						

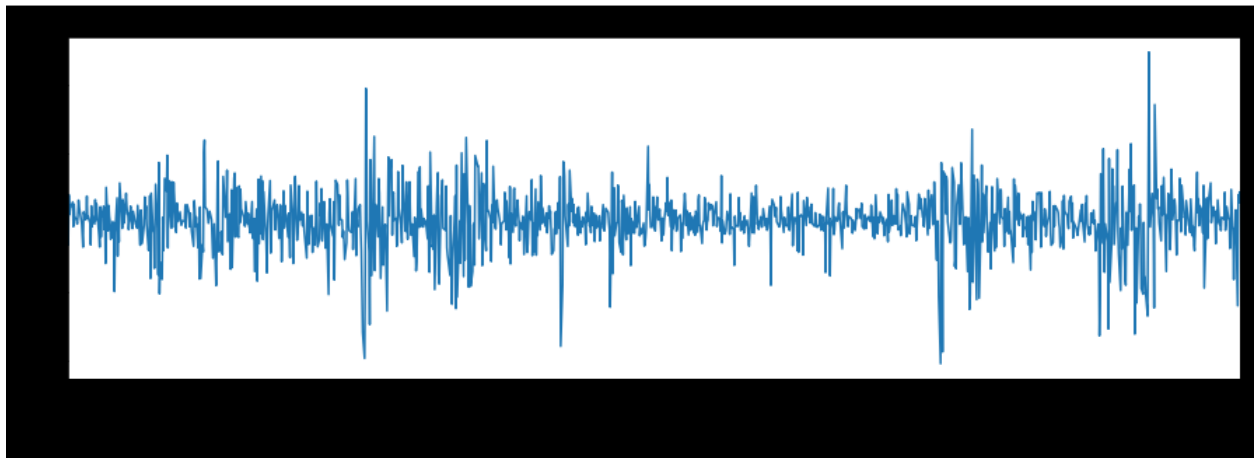
The next plot gives us a visual representation of our strategy drawdown series.



We have a series of “Lookback Returns”

mtd	834.95%
3m	-18.23%
6m	300.09%
ytd	4.74%
1y	119.07%
3y	-3.17%
5y	18.30%
10y	18.30%
incep	18.30%

Finally, let's check the plot of the equity curve.



RECOMMENDATION:

The index seems to be entering in an unstable moment now. Political factors might bring instability to stock markets. Worth mentioning the current trade war between the US and China. It might have some string effects on stock prices. Therefore, the moment requires caution.