FORMULAIC ALPHA REPORT

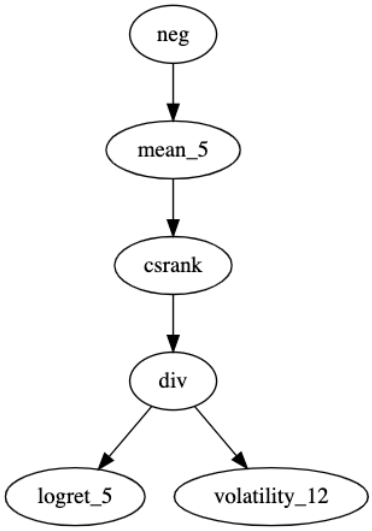
HangukQuant[1, 2*]

https://hangukquant.substack.com

1 2 3

ALPHA

```
neg(mean_5(csrank(div(logret_5(),volatility_12()))))
```



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All statistics, graphs and commentary shown use cost/friction-less assumptions and are for statistical purposes only. In practice, you will encounter *highly variable costs and results may deviate significantly from expectations*. Realized transaction costs for traders vary significantly in the execution techniques and market conditions, such as slippage, usage of passive orders, positional inertia, higher frequency order book information, position netting, choice of asset universe, timing and constraint optimization - we present frictionless results to admit comparability of performance.

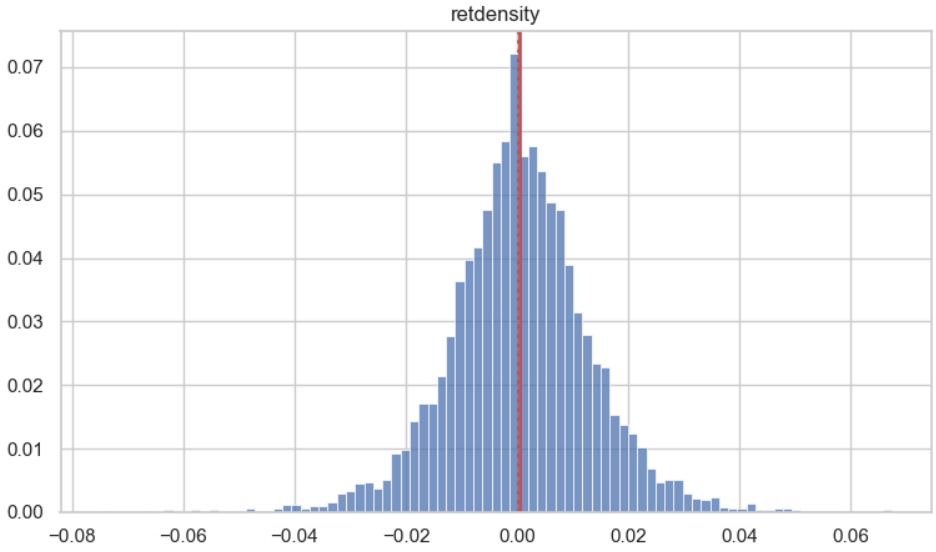
1 Returns

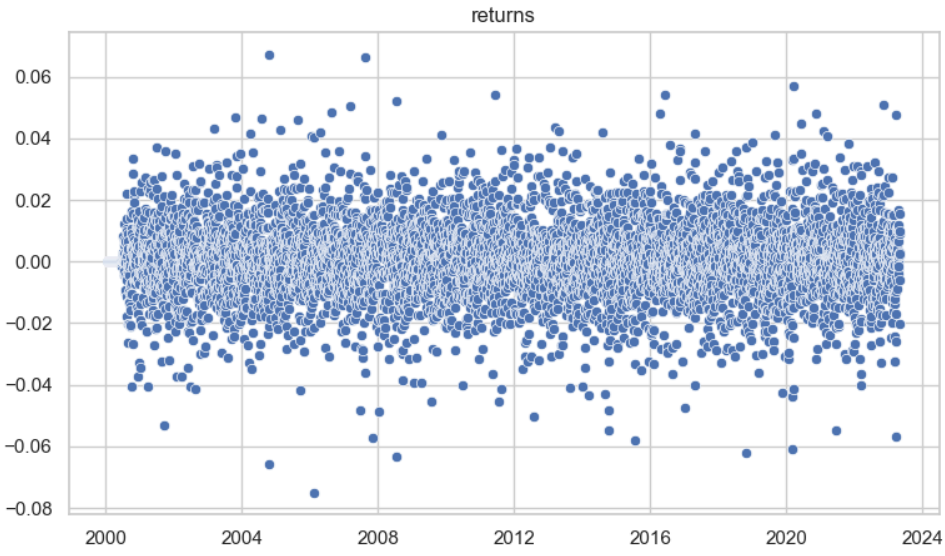
1.1 Performance Metrics

sortino:	0.934	**sharpe:**	0.627	**mean ret:**	0.128
median ret:	0.069	**stdev ret:**	0.205	**var ret:**	0.042
skew ret:	-0.081	**kurt exc:**	1.971	**cagr:**	0.113
omega(0):	1.111	**VaR95:**	-0.033	**cVaR95:**	-0.044
gain to pain:	0.724	**directionality:**	-0.01		

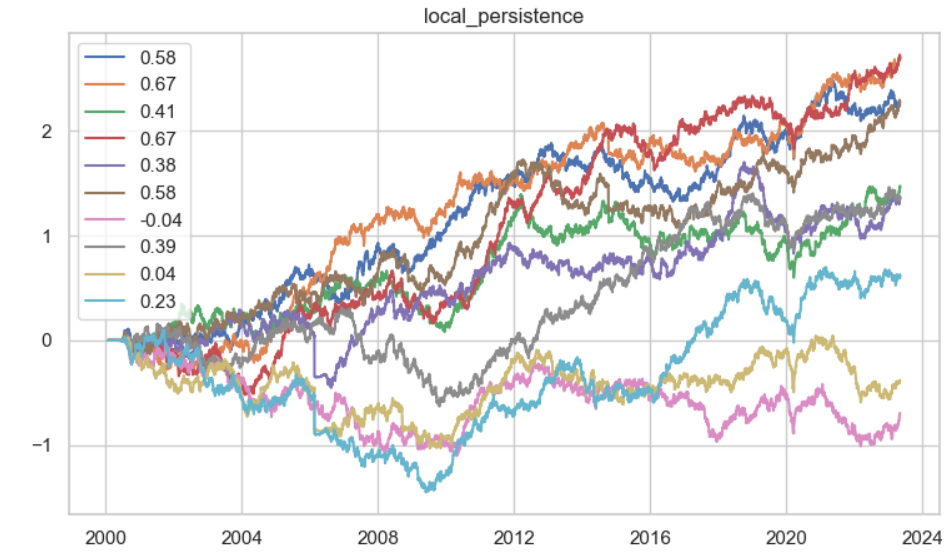
1.2 Seasonals

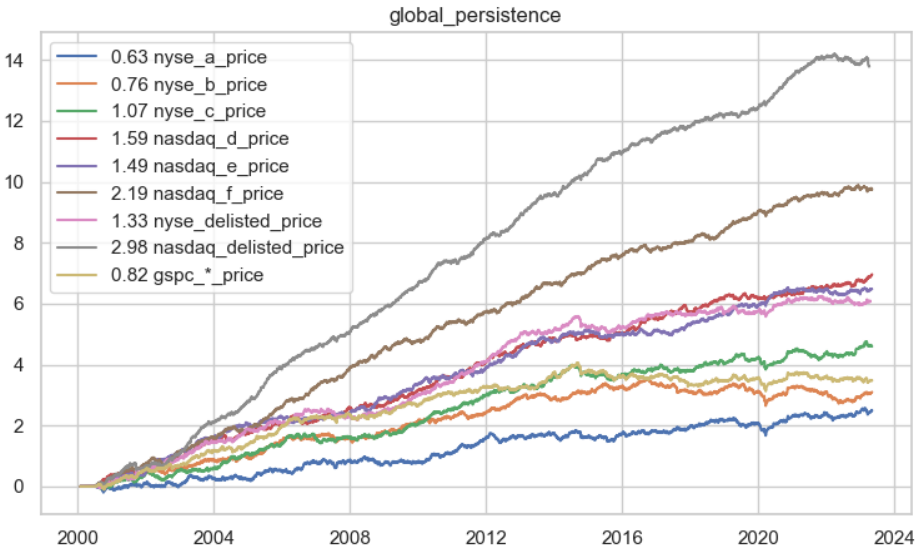
1.3 Density





1.4 Persistence





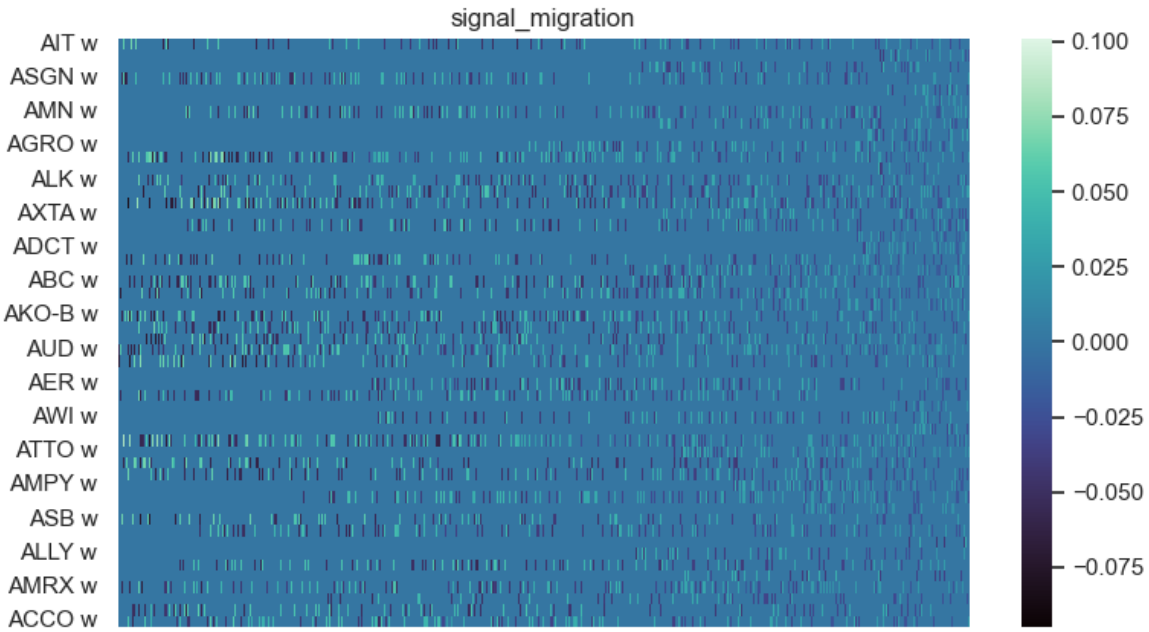
1.5 Monte Carlo Permutation Hypothesis Tests

timer p: 0.01 **picker p:** 0.01

trader p1: 0.01

2 Signals

2.1 Migration



2.2 Participation

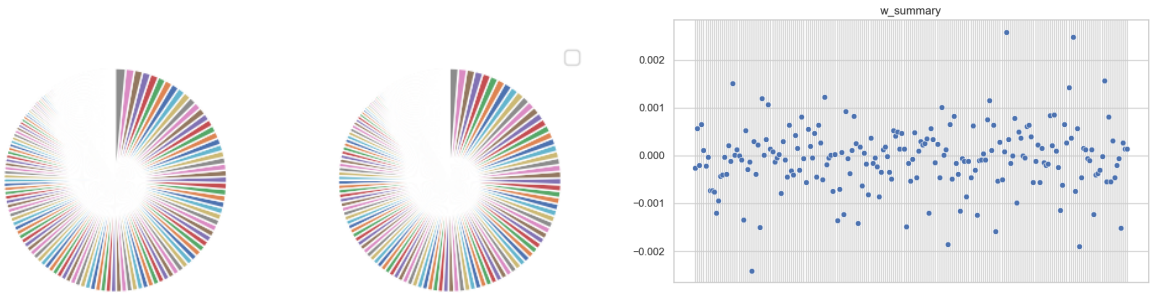


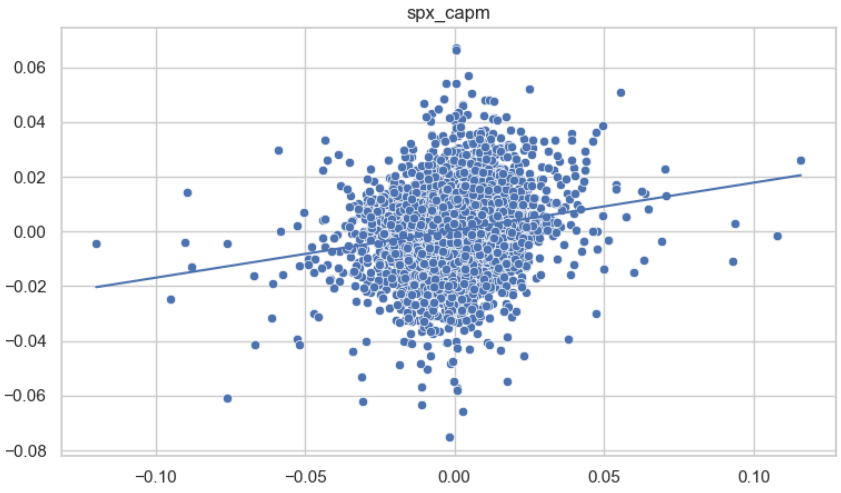
Table 1: $r \sim \alpha + \beta spx + \epsilon$

Dep. Variable:	y	**R-squared:**	0.028
Model:	OLS	**Adj. R-squared:**	0.028
Method:	Least Squares	**F-statistic:**	169.4
Date:	Thu, 23 Nov 2023	**Prob (F-statistic):**	3.31e-38
Time:	18:13:15	**Log-Likelihood:**	17254.
No. Observations:	5855	**AIC:**	-3.450e+04
Df Residuals:	5853	**BIC:**	-3.449e+04
Df Model:	1		
Covariance Type:	nonrobust		

	coef	**std err**	**t**	**P> |t|**	**[0.025**	**0.975]**
Intercept	0.0005	0.000	2.775	0.006	0.000	0.001
x	0.1737	0.013	13.017	0.000	0.148	0.200

3 Factor Model

3.1 GSPC MARKET



4 Popular Metrics