Project Overkill v1.1

21.10.2023

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Design by TRW: Archenemy

With notable contributions from:

salxx

back

–

Update

First feedback was received from fellow TRW members. Notable suggestions / ideas were:

1. Suggested development of strategies using Cryptocap / Binance
2. Reduction of strategy numbers and addition of other TPI components
3. Code suggested for building TPI signals based on 10 strategies.
4. Code suggested for building TPI signals based on less strategies plus other TPI components.
5. Ensuring time coherence between strats
6. The possible creation of a universal/general ALT TPI.

Due to the time consuming nature of building strategies, the idea of reducing the strategy number and adding other TPI components to provide signals especially for ALT's appears to be valid. Further insights suggest building combination TPI's for ALTs using baseline indicators to ensure time coherence. For instance, something simple like a 12 and 25 period EMA as a baseline macro trend scanner and then using that as a guideline.

Further work continues now with the implementation of the above. Continued strategy development and TPI components for ALT's, automation tests as well as scoring systems to determine asset allocation.

TPI by salxx. Combination of strats and TPI components

TPI by back. For combination of multiple strategies

Project Overkill v1.0

17.10.2023

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Design by TRW: Archenemy

With notable contributions from:

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Overview

This project's aim is to create a system based on aggregated strategies to provide investing signals for trending assets in the crypto space. The basic design centres around signals produced by 10 strategies per asset class, with 7 strats needed to be congruent in order to produce a valid signal. This may be reduced and/or automated in time.

Its design aims to take the benefits of SOPS, and combine it with flexible RSPS style allocations to take advantage of an ever changing market.

Further goals are the expansion of asset signals and automation.

This is a personal project and not financial advice. I'm not accountable for anything whatsoever presented here or your interpretation thereof.

Goals

1. To build a library of assets, each using 10 quality strategies
2. To create a scoring system for asset selection
3. To produce clean signals for portfolio management
4. To automate signals from TradingView into Google Sheets

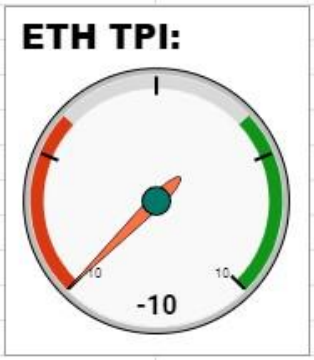
Initial Testing

A selection of 7 assets were included in initial testing. These were selected because of them being consider a major, i.e. BTC, ETH, their position in market cap, ADA, SOL, BNB and a representation of shitcoins i.e. EGLD, VET selected from observation/experience.

Strategy Development

Strategies were developed and modified for each of these using the strats available in the MC Strat List. These include BTC, ETH, ETH, ADA & BNB. The strats used for EGLD, VET and SOL were developed and modified from existing sources and should be considered experimental. These have been managed and coded to ensure consistency with tables and for export and automation purposes:

Strategy:	Value:	TV:	Component:	ETH
AA ETH 1 - Archy	-1			
AA ETH 2 - Lawless	-1			
AA ETH 3 - Maverick	-1			
AA ETH 4 - Faru	-1			
AA ETH 5 - Pecker	-1			
AA ETH 6 - Ocelot	-1			
AA ETH 7 - Killer	-1			
AA ETH 8 - Backslap	-1			
AA ETH 9 - Gen5	-1			
AA ETH 0 - Haven	-1			
TOTAL	-10		10	0



Portfolio Building

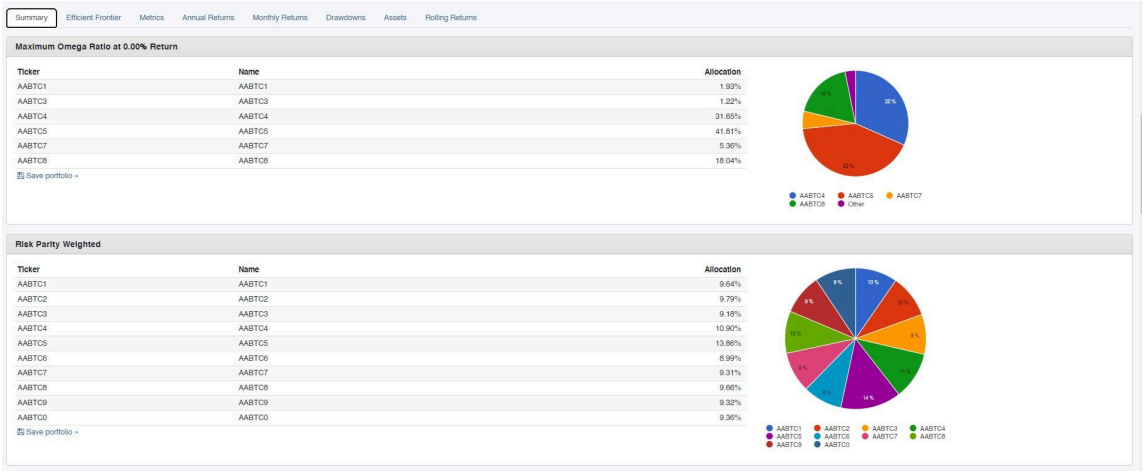
I. Portfolio Visualiser

Each asset had all 10 strats indexed and imported into Portfolio Visualiser. Extreme imbalances were observed in some cases, but included as the system relies on aggregated strats. The optimisations using Risk Parity were considered as more reliable in this case case study, again due to the aggregated approach to the design.

One more optimisation was done for the sake of science, i.e. an All-Stars portfolio using the best performing strategies of each set of strats.

Results were as follows:

BTC



Summary | Efficient Frontier | Metrics | Annual Returns | Monthly Returns | Drawdowns | Assets | Rolling Returns

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AABTC1	AABTC1	1.93%
AABTC3	AABTC3	1.22%
AABTC4	AABTC4	31.65%
AABTC5	AABTC5	41.81%
AABTC7	AABTC7	5.36%
AABTC8	AABTC8	18.04%

Save portfolio »

Risk Parity Weighted

Ticker	Name	Allocation
AABTC1	AABTC1	9.64%
AABTC2	AABTC2	9.79%
AABTC3	AABTC3	9.18%
AABTC4	AABTC4	10.90%
AABTC5	AABTC5	13.86%
AABTC6	AABTC6	8.99%
AABTC7	AABTC7	9.31%
AABTC8	AABTC8	9.66%
AABTC9	AABTC9	9.32%
AABTC0	AABTC0	9.36%

Save portfolio »

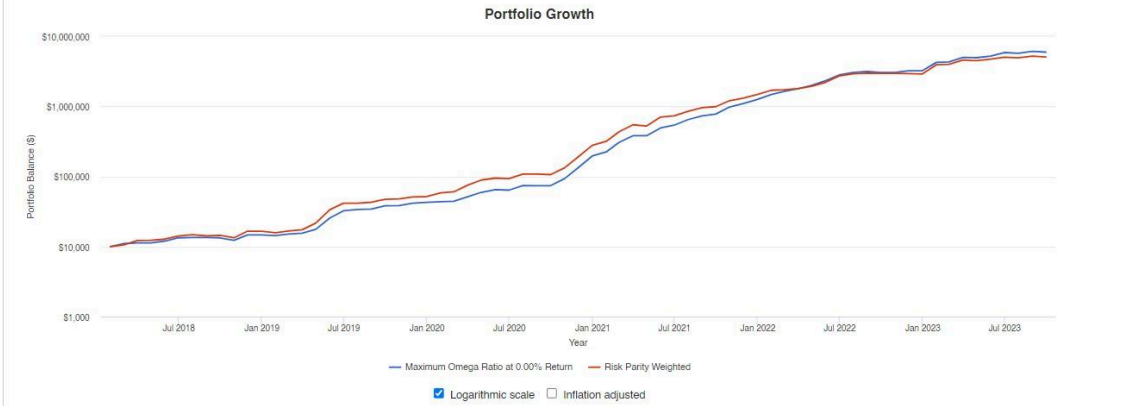
Portfolio Performance Summary

Performance Summary

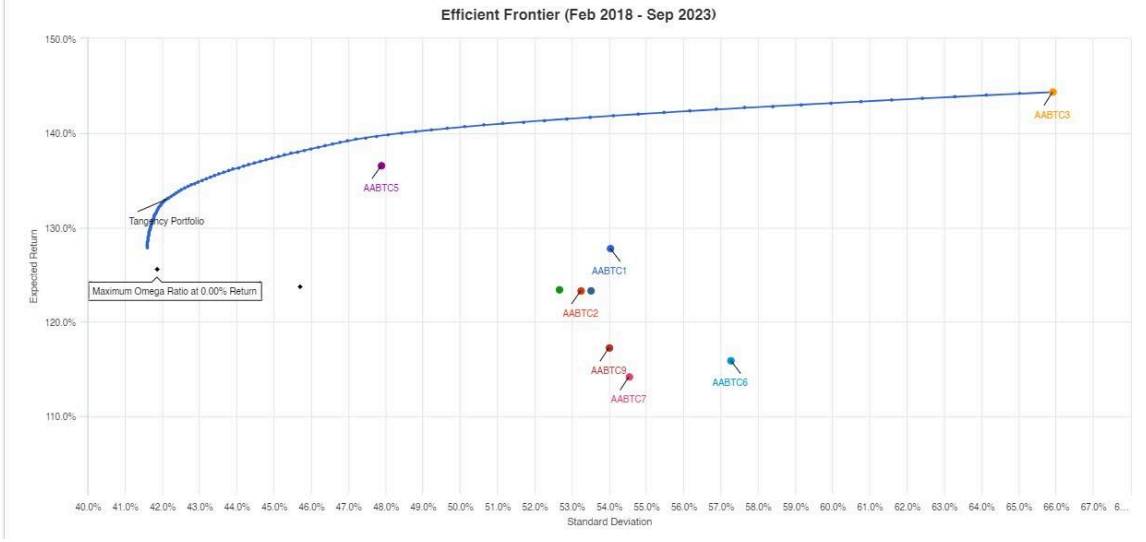
Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$5,966,570	$5,083,944
Annualized Return (CAGR)	208.91%	200.31%
Expected Return	125.53%	123.72%
Standard Deviation	41.85%	45.71%
Best Year	540.78%	437.56%
Worst Year	47.30%	65.76%
Maximum Drawdown	-8.58%	-9.41%
Sharpe Ratio (ex-ante)	2.96	2.67
Sharpe Ratio (ex-post)	2.95	2.66
Sortino Ratio	26.27	23.64
Omega Ratio	31.69	21.51
Stock Market Correlation	0.20	0.12

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth



Efficient Frontiers



ETH

Summary | Efficient Frontier | Metrics | Annual Returns | Monthly Returns | Drawdowns | Assets | Rolling Returns

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AAETH1	AAETH1	3.94%
AAETH2	AAETH2	18.52%
AAETH3	AAETH3	39.47%
AAETH4	AAETH4	0.30%
AAETH5	AAETH5	0.36%
AAETH7	AAETH7	17.60%
AAETH0	AAETH0	19.81%

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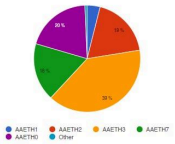

Risk Parity Weighted

Ticker	Name	Allocation
AAETH1	AAETH1	12.17%
AAETH2	AAETH2	9.71%
AAETH3	AAETH3	10.54%
AAETH4	AAETH4	10.94%
AAETH5	AAETH5	9.12%
AAETH6	AAETH6	9.78%
AAETH7	AAETH7	9.75%
AAETH8	AAETH8	9.17%
AAETH9	AAETH9	9.17%
AAETH0	AAETH0	9.64%

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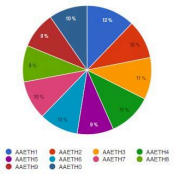


Portfolio Performance Summary

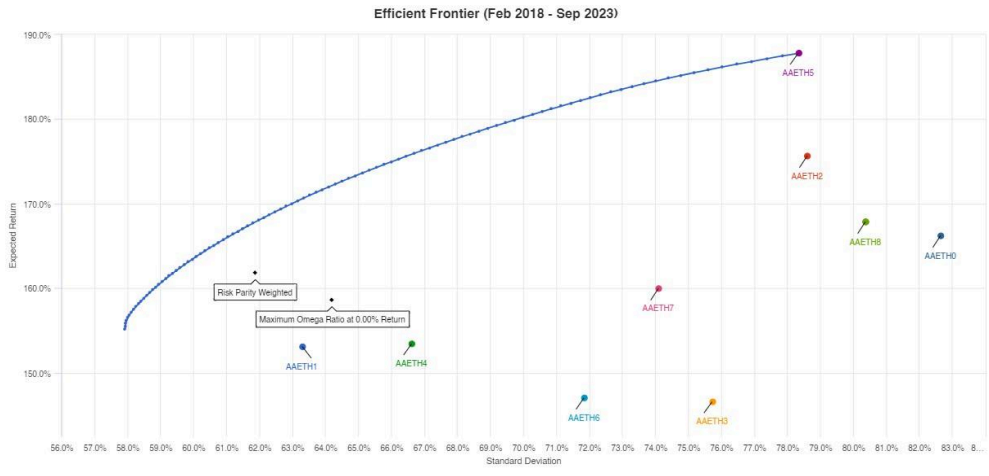
Performance Summary

Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$21,046,560	$25,544,978
Annualized Return (CAGR)	285.87%	299.29%
Expected Return	158.63%	161.85%
Standard Deviation	64.19%	61.66%
Best Year	1,200.74%	1,038.14%
Worst Year	16.72%	14.80%
Maximum Drawdown	-15.13%	-13.54%
Sharpe Ratio (ex-ante)	2.44	2.59
Sharpe Ratio (ex-post)	2.44	2.58
Sortino Ratio	18.37	15.53
Omega Ratio	18.80	12.89
Stock Market Correlation	-0.03	0.01

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth

Efficient Frontiers



BNB

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AABNB1	AABNB1	7.02%
AABNB4	AABNB4	21.77%
AABNB5	AABNB5	33.71%
AABNB6	AABNB6	1.09%
AABNB0	AABNB0	36.40%

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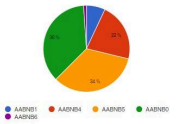
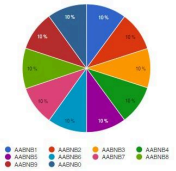


Risk Parity Weighted

Ticker	Name	Allocation
AABNB1	AABNB1	10.12%
AABNB2	AABNB2	9.91%
AABNB3	AABNB3	9.93%
AABNB4	AABNB4	9.98%
AABNB5	AABNB5	10.07%
AABNB6	AABNB6	9.92%
AABNB7	AABNB7	9.91%
AABNB8	AABNB8	10.23%
AABNB9	AABNB9	9.98%
AABNB0	AABNB0	9.96%

Save portfolio »



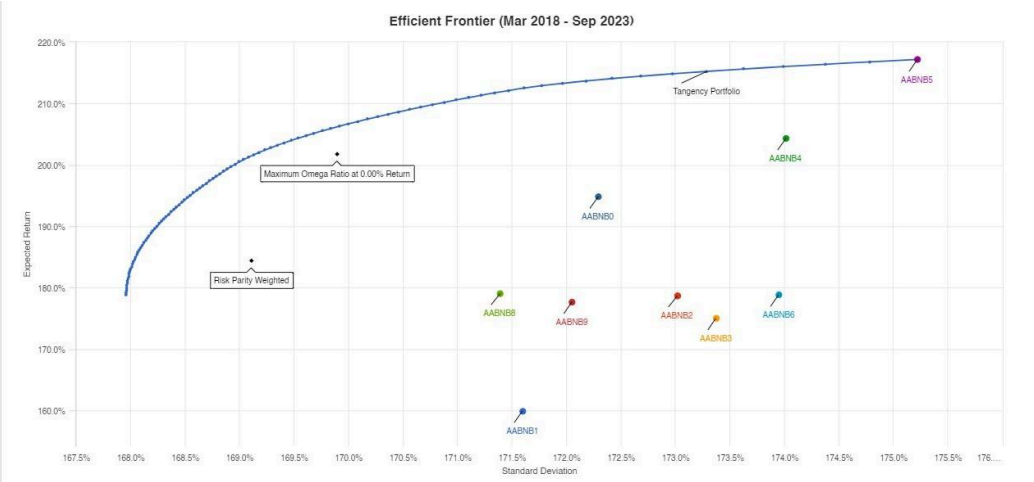
Portfolio Performance Summary

Performance Summary

Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$22,964,877	$10,308,547
Annualized Return (CAGR)	299.93%	246.48%
Expected Return	201.79%	184.39%
Standard Deviation	169.89%	169.11%
Best Year	3,932.21%	3,502.26%
Worst Year	29.47%	21.78%
Maximum Drawdown	-19.10%	-21.31%
Sharpe Ratio (ex-ante)	1.18	1.08
Sharpe Ratio (ex-post)	1.18	1.08
Sortino Ratio	18.92	14.73
Omega Ratio	16.27	11.13
Stock Market Correlation	0.06	0.06

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth



ADA

Summary | Efficient Frontier | Metrics | Annual Returns | Monthly Returns | Drawdowns | Assets | Rolling Returns

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AAADA1	AAADA1	50.70%
AAADA3	AAADA3	10.40%
AAADA5	AAADA5	14.44%
AAADA8	AAADA8	12.88%
AAADA9	AAADA9	11.58%

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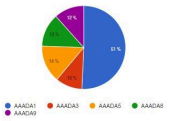
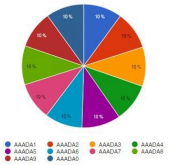


Risk Parity Weighted

Ticker	Name	Allocation
AAADA1	AAADA1	10.04%
AAADA2	AAADA2	10.03%
AAADA3	AAADA3	10.26%
AAADA4	AAADA4	10.02%
AAADA5	AAADA5	10.11%
AAADA6	AAADA6	9.82%
AAADA7	AAADA7	9.77%
AAADA8	AAADA8	10.21%
AAADA9	AAADA9	9.81%
AAADA0	AAADA0	9.91%

Save portfolio »



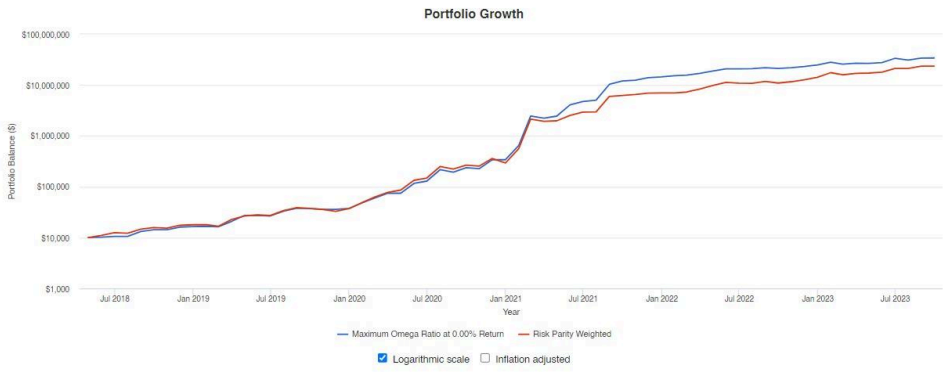
Portfolio Performance Summary

Performance Summary

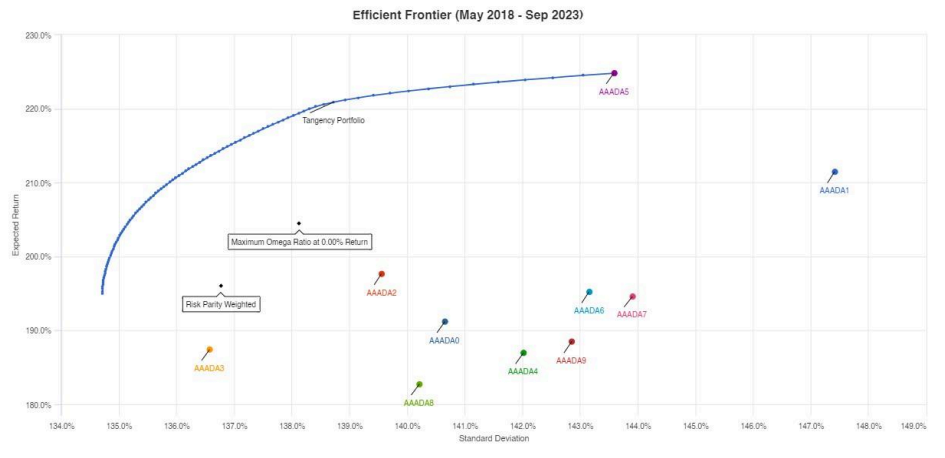
Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$33,975,123	$23,561,490
Annualized Return (CAGR)	348.65%	319.33%
Expected Return	204.51%	196.04%
Standard Deviation	136.12%	136.77%
Best Year	4,144.62%	2,273.62%
Worst Year	36.60%	65.29%
Maximum Drawdown	-10.34%	-18.35%
Sharpe Ratio (ex-ante)	1.47	1.42
Sharpe Ratio (ex-post)	1.47	1.42
Sortino Ratio	24.05	15.29
Omega Ratio	22.04	12.49
Stock Market Correlation	0.08	0.08

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth



Efficient Frontiers

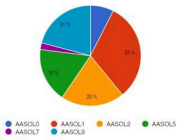


SOL

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AASOL0	AASOL0	7.48%
AASOL1	AASOL1	31.68%
AASOL2	AASOL2	20.29%
AASOL5	AASOL5	17.55%
AASOL7	AASOL7	2.17%
AASOL9	AASOL9	20.84%

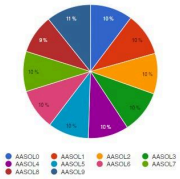
Save portfolio »



Risk Parity Weighted

Ticker	Name	Allocation
AASOL0	AASOL0	10.25%
AASOL1	AASOL1	10.38%
AASOL2	AASOL2	9.83%
AASOL3	AASOL3	10.31%
AASOL4	AASOL4	9.75%
AASOL5	AASOL5	9.81%
AASOL6	AASOL6	9.84%
AASOL7	AASOL7	9.71%
AASOL8	AASOL8	9.43%
AASOL9	AASOL9	10.70%

Save portfolio »



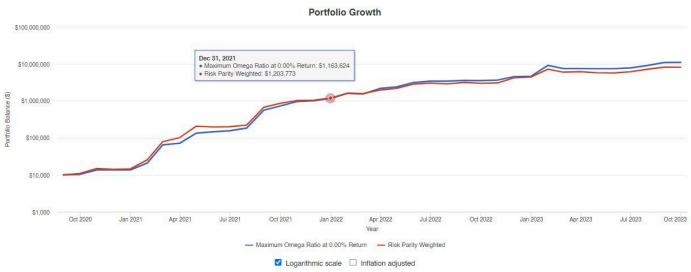
Portfolio Performance Summary

Performance Summary

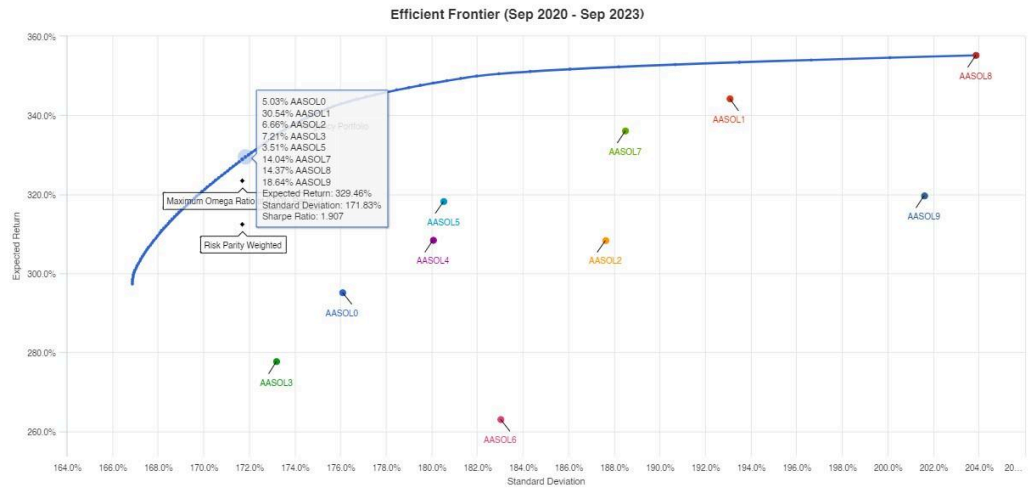
Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$11,117,701	$8,202,547
Annualized Return (CAGR)	672.52%	781.18%
Expected Return	323.36%	312.34%
Standard Deviation	171.69%	171.70%
Best Year	8,407.10%	8,175.84%
Worst Year	36.78%	45.46%
Maximum Drawdown	-18.61%	-21.06%
Sharpe Ratio (ex-ante)	1.87	1.81
Sharpe Ratio (ex-post)	1.87	1.81
Sortino Ratio	30.00	25.53
Omega Ratio	43.16	21.34
Stock Market Correlation	0.18	0.16

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth



Efficient Frontiers

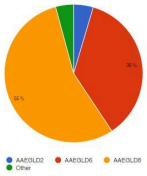


EGLD

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AAEGLD0	AAEGLD0	0.02%
AAEGLD1	AAEGLD1	1.62%
AAEGLD2	AAEGLD2	4.58%
AAEGLD3	AAEGLD3	0.35%
AAEGLD4	AAEGLD4	0.39%
AAEGLD5	AAEGLD5	0.66%
AAEGLD6	AAEGLD6	36.11%
AAEGLD7	AAEGLD7	0.03%
AAEGLD8	AAEGLD8	55.11%
AAEGLD9	AAEGLD9	1.12%

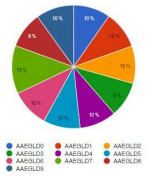
Save portfolio »



Risk Parity Weighted

Ticker	Name	Allocation
AAEGLD0	AAEGLD0	9.68%
AAEGLD1	AAEGLD1	9.87%
AAEGLD2	AAEGLD2	9.84%
AAEGLD3	AAEGLD3	9.28%
AAEGLD4	AAEGLD4	9.65%
AAEGLD5	AAEGLD5	9.66%
AAEGLD6	AAEGLD6	9.95%
AAEGLD7	AAEGLD7	12.66%
AAEGLD8	AAEGLD8	9.49%
AAEGLD9	AAEGLD9	9.93%

Save portfolio »



Portfolio Performance Summary

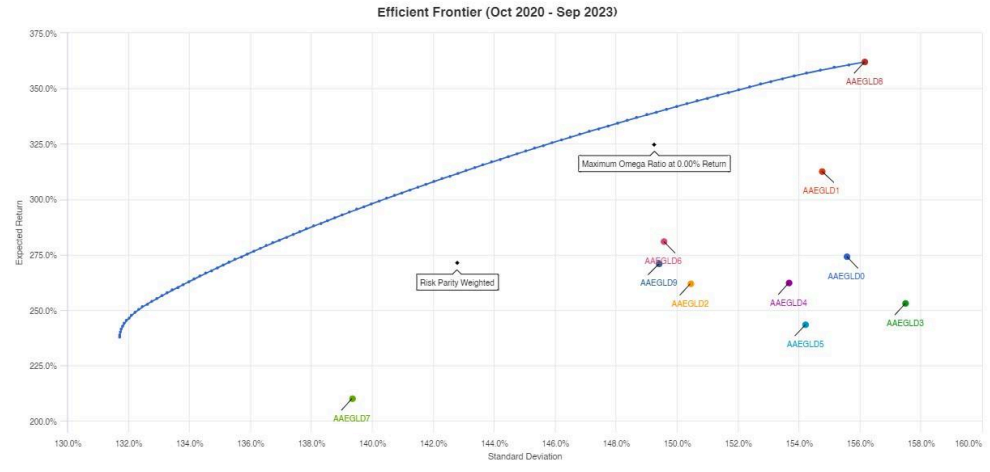
Performance Summary

Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$13,418,164	$3,740,832
Annualized Return (CAGR)	1,002.97%	620.54%
Expected Return	324.65%	271.19%
Standard Deviation	149.25%	142.79%
Best Year	5,974.23%	3,871.58%
Worst Year	91.19%	18.83%
Maximum Drawdown	0.00%	-10.63%
Sharpe Ratio (ex-ante)	2.16	1.89
Sharpe Ratio (ex-post)	2.16	1.88
Sortino Ratio	1,178.46	45.47
Omega Ratio	N/A	39.40
Stock Market Correlation	0.01	0.03

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth

Efficient Frontiers

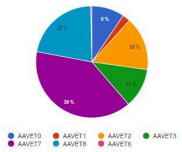


VET

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AAVET0	AAVET0	9.47%
AAVET1	AAVET1	2.23%
AAVET2	AAVET2	15.53%
AAVET3	AAVET3	11.45%
AAVET6	AAVET6	0.32%
AAVET7	AAVET7	39.26%
AAVET8	AAVET8	21.73%

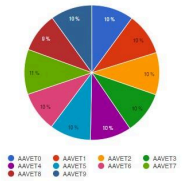
Save portfolio »



Risk Parity Weighted

Ticker	Name	Allocation
AAVET0	AAVET0	10.07%
AAVET1	AAVET1	10.13%
AAVET2	AAVET2	10.13%
AAVET3	AAVET3	10.17%
AAVET4	AAVET4	9.85%
AAVET5	AAVET5	9.85%
AAVET6	AAVET6	9.58%
AAVET7	AAVET7	10.81%
AAVET8	AAVET8	9.45%
AAVET9	AAVET9	9.96%

Save portfolio »



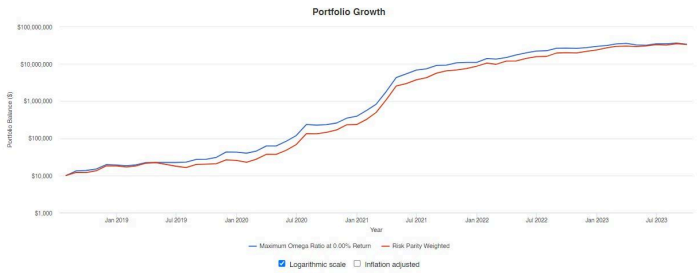
Portfolio Performance Summary

Performance Summary

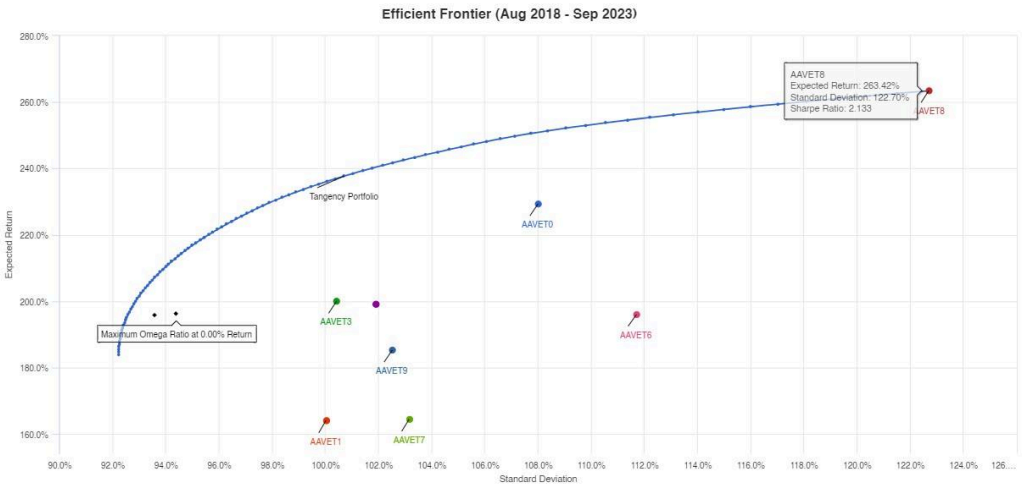
Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$33,859,928	$33,191,549
Annualized Return (CAGR)	382.13%	380.27%
Expected Return	196.17%	195.76%
Standard Deviation	94.38%	93.58%
Best Year	2,694.16%	3,611.75%
Worst Year	14.17%	39.52%
Maximum Drawdown	-10.92%	-26.10%
Sharpe Ratio (ex-ante)	2.06	2.07
Sharpe Ratio (ex-post)	2.06	2.07
Sortino Ratio	27.53	18.20
Omega Ratio	25.43	14.98
Stock Market Correlation	0.12	0.11

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth



Efficient Frontiers

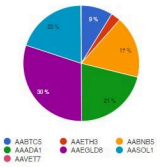


ALL STARS

Maximum Omega Ratio at 0.00% Return

Ticker	Name	Allocation
AABTC5	AABTC5	8.82%
AAETH3	AAETH3	2.67%
AABNB5	AABNB5	17.36%
AAADA1	AAADA1	21.04%
AAEGLD8	AAEGLD8	30.17%
AASOL1	AASOL1	19.84%
AAVET7	AAVET7	0.10%

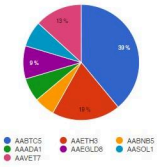
Save portfolio »



Risk Parity Weighted

Ticker	Name	Allocation
AABTC5	AABTC5	39.03%
AAETH3	AAETH3	19.12%
AABNB5	AABNB5	5.70%
AAADA1	AAADA1	6.54%
AAEGLD8	AAEGLD8	9.22%
AASOL1	AASOL1	7.20%
AAVET7	AAVET7	13.18%

Save portfolio »



Portfolio Performance Summary

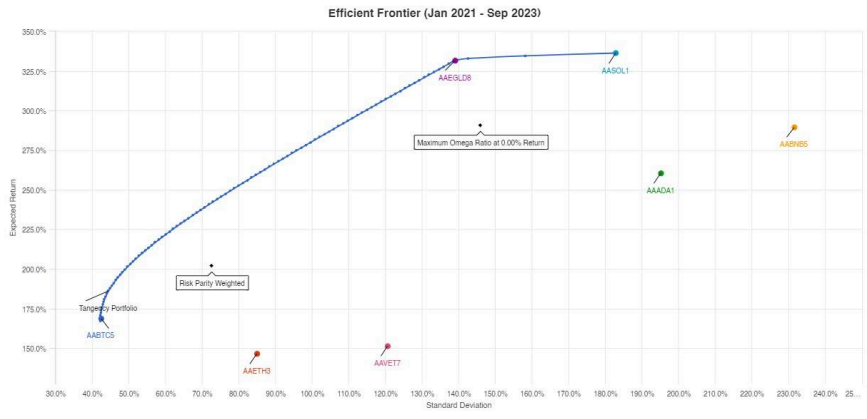
Performance Summary

Metric	Maximum Omega Ratio at 0.00% Return	Risk Parity Weighted
Start Balance	$10,000	$10,000
End Balance	$4,032,413	$1,097,119
Annualized Return (CAGR)	786.09%	451.96%
Expected Return	290.75%	202.11%
Standard Deviation	145.95%	72.59%
Best Year	6,860.53%	2,446.31%
Worst Year	85.20%	47.33%
Maximum Drawdown	0.00%	-4.66%
Sharpe Ratio (ex-ante)	1.98	2.76
Sharpe Ratio (ex-post)	1.98	2.74
Sortino Ratio	1,070.42	59.86
Omega Ratio	N/A	59.26
Stock Market Correlation	0.16	0.20

Results based on historical returns. Expected return is the annualized monthly arithmetic mean return.

Portfolio Growth

Efficient Frontiers



II. Asset Allocations

The next step was to calculate suggesting weightings for assets using Downside Deviation. Two calculations were done. Omega & Risk Parity.

	BTC	ETH	BNB	ADA	SOL	EGLD	VET
Downside Deviation	1,19	2,4	2,98	2,37	2,98	0,01	3,83
Inverse Volatility *(1/Downside Dev)*	0,840336	0,416667	0,33557	0,421941	0,33557	100	0,261097
Normalised Values *(SUM PV1, PV2, PV3))*							102,6112
Normalised Weights *(PV/SUM)*	0,00819	0,004061	0,00327	0,004112	0,00327	0,974553	0,002545
Portfolio Amount	**10000**	**10000**	**10000**	**10000**	**10000**	**10000**	**10000**
Allocation *(Normalised Weights * Portfolio)*	81,89518	40,60636	32,70311	41,12037	32,70311	9745,527	25,44524

	BTC	ETH	BNB	ADA	SOL	EGLD	VET
Downside Deviation	1,41	2,91	3,5	3,62	3,5	1,61	3,83
Inverse Volatility *(1/Downside Dev)*	0,70922	0,343643	0,285714	0,276243	0,285714	0,621118	0,261097
Normalised Values *(SUM PV1, PV2, PV3))*							2,782749
Normalised Weights *(PV/SUM)*	0,254863	0,12349	0,102673	0,09927	0,102673	0,223203	0,093827
Portfolio Amount	**10000**	**10000**	**10000**	**10000**	**10000**	**10000**	**10000**
Allocation *(Normalised Weights * Portfolio)*	2548,631	1234,903	1026,734	992,6987	1026,734	2232,031	938,2687

In the Omega version, an extreme irregularity was observed. There was no downside deviation in the EGLD set of strats. Value was 0%. (When replaced with the value from the Risk Parity optimisation, the allocation percentages were similar.)

Final allocation amounts were:

BTC	ETH	BNB	ADA	SOL	EGLD	VET
25,49%	12,35%	10,27%	9,93%	10,27%	22,32%	9,38%

From the above, possible conclusions from this were that this could be averaged to a position size and managed with a scoring system to determine the portfolio allocation. Initial idea is a slot based system of 7 assets trading perpetually.

III. Expectations

It is my personal expectation that the majors should at the very least 3x during the next market cycle, with selected ALT's performing from 5 - 7x from bottom to peak.

The goal of this portfolio is not to create the most efficient portfolio on earth, but rather a conservative one with a higher chance of success. An average of a minimum of 5x is the goal of this portfolio. With a goal of an average of 5x across all assets, and a further goal of -5x on the way down from the peak of the next run, the expectations of the portfolio are as follows:

With a portfolio of $100,000:

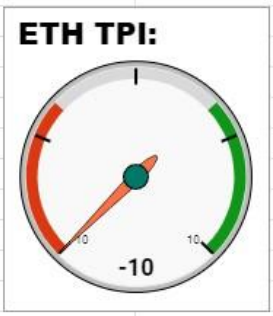
100,000 x 5 x 5 = 2,500,000

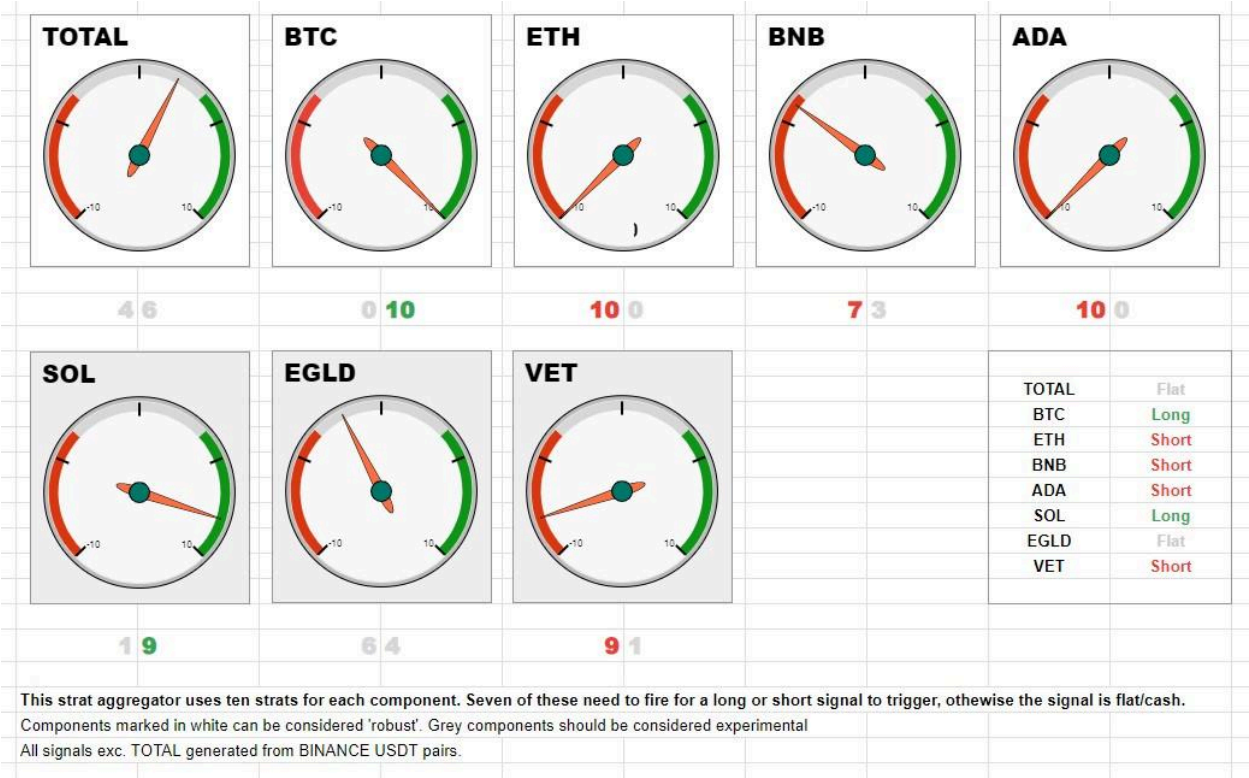
Anything else in my mind is a bonus and should be considered **OVERKILL.**

Signals

The first signals from this project take the form of gauges showing how many strats are firing LONG or SHORT.

Strategy:	Value:	TV:	Component:	ETH
AA ETH 1 - Archy	-1			
AA ETH 2 - Lawless	-1			
AA ETH 3 - Maverick	-1			
AA ETH 4 - Faru	-1			
AA ETH 5 - Pecker	-1			
AA ETH 6 - Ocelot	-1			
AA ETH 7 - Killer	-1			
AA ETH 8 - Backslap	-1			
AA ETH 9 - Gen5	-1			
AA ETH 0 - Haven	-1			





Gauges show how many strats are firing LONG or SHORT. Conditional formatting colours the values green or red if they are greater than 7. Gauges are set up to signal flat when the strat count is less than 7. If the gauge is grey, this indicates neutral or CASH.

Extended Asset Selection

The next phase of the project now moves into first, extending asset selection through the development of new strategies, second, the creation of a scoring system to manage asset allocation and third, the automation thereof to provide signals in Google Sheets. Strats wanted, but are not limited to are:

SOL
EGLD
VET

LINK
AVAX
DOGE
DOT
TRON
MATIC
AAVE
ALGO
RUNE
SHIB

New strat ideas and coins are welcome. If you would like to contribute to this project, please dm me in TRW requesting access to the project: