



QUANTUM FINANCIAL

RESEARCH

ANALYSIS

Experts in Algorithmic Trading and
Portfolio Management

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Past results are not necessarily indicative of future results.

These results are based on simulated or hypothetical performance results that have certain inherent limitations. Unlike the results shown in an actual performance record, these results do not represent actual trading. Also, because these trades have not actually been executed, these results may have under-or over-compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated or hypothetical trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to these being shown.

In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program, which cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results.

Overview

Well diversified mid-size portfolio with very good diversification and great MAR ratio.

This portfolio was made with aims:

- To maximize returns
- To minimize amount of DD periods
- To minimize P/L volatility
- Keep diversification / keep minimal or zero correlation inside portfolio

Concept

One portfolio which consists of combination intraday and swing trading systems. During the time add additional trading systems of markets which are not involved yet. Keep minimal or zero correlation between them.

Characteristics

- Each system in portfolio trades different market
- Each system has different logic
- Systems involved are combination of:
 - Intraday and swing
 - breakout and market systems
 - Systems included are long/short, long only, short only

Requirements

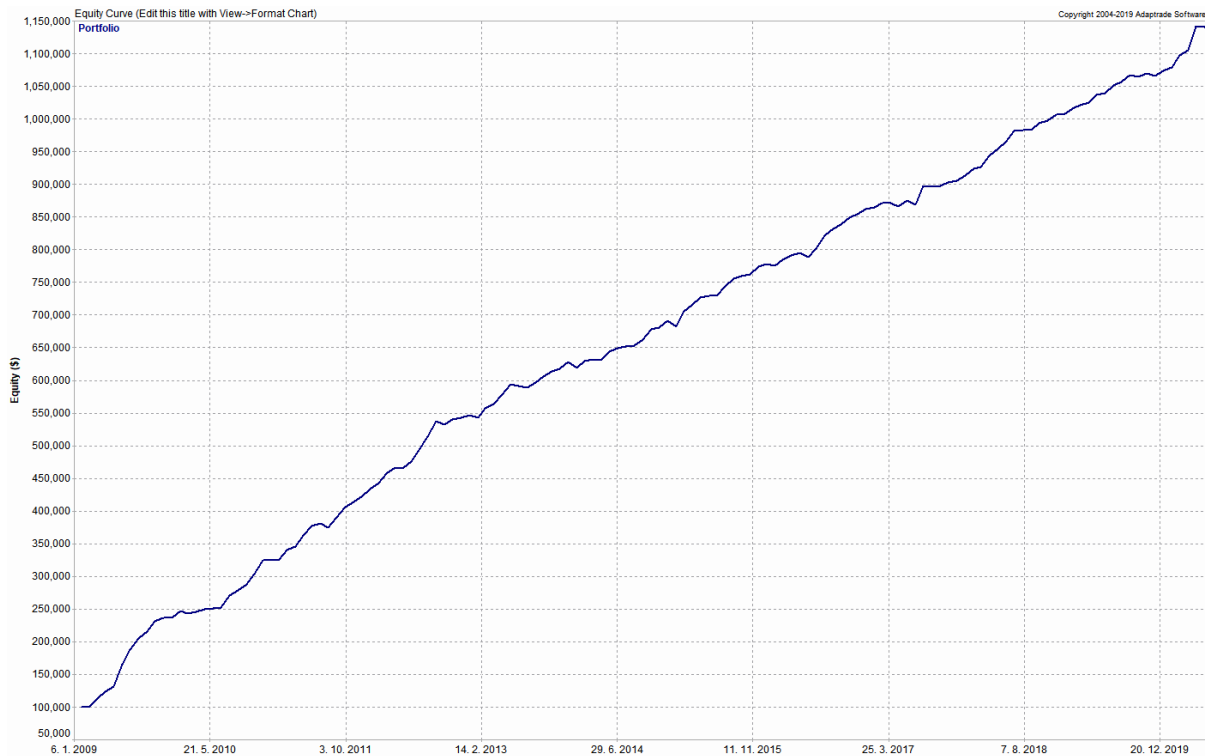
- ✓ Auto traded on Tradestation with monthly subscription
- ✓ Liquid markets
- ✓ Slippage and commissions involved in results (\$25 / \$35 per trade)
- ✓ Max historical DD of portfolio under \$25k
- ✓ Portfolio VaR lower than \$25k
- ✓ Max historical DD per system lower than \$10 - \$15k

Involved systems

1. Adamant ES – Intraday breakout
2. Chronos HO – intraday breakout
3. Osaka LH – swing breakout
4. Koronas C – swing market
5. Egon EC – swing mean reversion
6. Huron NQ – long swing breakout
7. Andalucia KW – swing breakout
8. Adagio S – swing market
9. Solo SM – swing market
10. Grim GC – intraday breakout

Hypothetical historical performance data

* includes \$35 transaction costs + slippage (for YM, NQ = \$25; for GC = \$45)



Starting Equity: **\$100,000.00**

Prof Fact	1.583
Net Profit	\$1,040,028.00
Sortino Ratio	5.876
MAR Ratio	3.928
Sharpe Ratio	0.5743
Ave Annual PL	\$91,031.40
Ave Monthly PL	\$7,585.95
Ave Weekly PL	\$1,741.69
\$ Trade Std Dev	\$1,097.01
Total Trades	6,552
Pct Wins	51.68%
Max \$ Win	\$15,140.00
Ave \$ Win	\$834.45
Max \$ Loss	-\$3,872.00
Ave \$ Loss	-\$563.93
\$ Win/Loss Ratio	1.480
Ave \$ Trade	\$158.73
Max \$ Drawdown	-\$15,968.00

Annual Returns										
Year	Net Profit	Add/With	End Equity	Return(%)	Drawdown	Drawdown(%)	Trades	Wins(%)	P Fac	Sharpe
2020	\$66,849.00	\$0.00	\$1,140,028.00	6.229	\$8,271.00	0.7439	235	50.21	1.896	0.4985
2019	\$66,110.00	\$0.00	\$1,073,179.00	6.565	\$10,510.00	1.024	559	51.34	1.470	1.164
2018	\$93,650.00	\$0.00	\$1,007,069.00	10.25	\$7,875.00	0.7963	541	50.46	1.651	1.257
2017	\$50,741.00	\$0.00	\$913,419.00	5.882	\$10,241.00	1.167	556	50.00	1.434	0.4680
2016	\$84,524.00	\$0.00	\$862,678.00	10.86	\$13,167.00	1.643	544	52.57	1.629	0.9654
2015	\$87,167.00	\$0.00	\$778,154.00	12.61	\$10,500.00	1.466	586	51.02	1.560	0.8213
2014	\$63,118.00	\$0.00	\$690,987.00	10.05	\$15,968.00	2.520	611	50.57	1.341	0.7656
2013	\$81,485.00	\$0.00	\$627,869.00	14.91	\$11,435.00	1.931	633	52.61	1.523	0.9404
2012	\$113,041.00	\$0.00	\$546,384.00	26.09	\$14,641.00	2.905	661	52.34	1.579	1.093
2011	\$108,113.00	\$0.00	\$433,343.00	33.24	\$14,773.00	3.788	562	52.49	1.537	1.252
2010	\$87,992.00	\$0.00	\$325,230.00	37.09	\$11,101.00	4.392	539	51.76	1.621	0.9149
2009	\$137,238.00	\$0.00	\$237,238.00	137.2	\$7,576.00	6.044	525	53.90	1.977	1.036
Ave	\$86,669.00	\$0.00	\$719,631.50	25.92	\$11,338.17	2.368	546.0	51.61	1.602	0.9313
SD	\$24,225.71	\$0.00	\$294,689.80	36.63	\$2,791.21	1.647	106.3	1.202	0.1802	0.2598

Monthly Returns										
Month	Net Profit	Add/With	End Equity	Return(%)	Drawdown	Drawdown(%)	Trades	Wins(%)	P Fac	
Ave	\$7,536.43	\$0.00	\$659,955.43	1.825	\$4,920.12	1.064	47.48	51.74	1.752	
SD	\$8,066.41	\$0.00	\$287,354.75	3.178	\$2,560.30	1.011	8.872	7.369	0.8975	

Portfolio Max Risk / VaR

	USD
Max Historical DD	13 770
MC DD 95%*	26 500
MC DD 99%**	32 500

* Consider turn off

** Turn off

VaR (Value at Risk) => for our purpose we calculate as portfolio Monte Carlo drawdown with confidence level 99%.

This situation may occur with extremely low probability. It represents situation when we stop trading and consider portfolio as it stopped to work properly.

Capitalization / Risk

	Max Historical DD = \$ 13 770	Max VaR = \$ 32 500
Account size	Max Historical DD (%)	Max VaR (%)
\$ 70k	19,67	46,42
\$ 150k	9,18	21,66
\$ 300k	4,59	10,83

Correlation analysis

- | | |
|-----------------------------------|-----------------------------------|
| 1. Adamant ES – Intraday breakout | 6. Huron NQ – long swing breakout |
| 2. Chronos HO – intraday breakout | 7. Andalucia KW – swing breakout |
| 3. Osaka LH – swing breakout | 8. Adagio S – swing market |
| 4. Koronas C – swing market | 9. Solo SM – swing market |
| 5. Egon EC – swing mean reversion | 10. Grim GC – intraday breakout |

Correlations Based on Daily Returns										
	1	2	3	4	5	6	7	8	9	10
1	1.000	-0.1765	0.2460	-0.01784	0.5601	-0.01126	0.6496	0.04908	0.05220	0.1597
2	-0.1765	1.000	-0.02645	-0.07730	-0.1692	0.08771	0.04216	-0.01238	0.02184	0.07297
3	0.2460	-0.02645	1.000	0.07106	0.5151	0.01890	0.1355	0.05637	0.2821	-0.006126
4	-0.01784	-0.07730	0.07106	1.000	-0.06875	-0.02193	-0.04093	0.02710	-0.06034	0.1606
5	0.5601	-0.1692	0.5151	-0.06875	1.000	0.1253	0.2393	-0.01351	-0.09698	0.03805
6	-0.01126	0.08771	0.01890	-0.02193	0.1253	1.000	0.01006	-0.09392	0.1139	-0.005049
7	0.6496	0.04216	0.1355	-0.04093	0.2393	0.01006	1.000	0.03555	0.02589	0.1323
8	0.04908	-0.01238	0.05637	0.02710	-0.01351	-0.09392	0.03555	1.000	0.05344	0.1535
9	0.05220	0.02184	0.2821	-0.06034	-0.09698	0.1139	0.02589	0.05344	1.000	0.01056
10	0.1597	0.07297	-0.006126	0.1606	0.03805	-0.005049	0.1323	0.1535	0.01056	1.000

Correlations Based on Monthly Returns										
	1	2	3	4	5	6	7	8	9	10
1	1.000	-0.06337	0.2943	0.000022	-0.02817	-0.009463	0.4871	0.1303	-0.01061	0.03711
2	-0.06337	1.000	-0.05439	0.1190	-0.09373	-0.05873	-0.07191	0.03815	0.08626	0.06776
3	0.2943	-0.05439	1.000	-0.04807	0.2042	-0.06876	0.2085	0.1646	-0.04342	0.02450
4	0.000022	0.1190	-0.04807	1.000	-0.04615	-0.06528	0.06419	-0.09959	0.1205	0.09211
5	-0.02817	-0.09373	0.2042	-0.04615	1.000	-0.1347	-0.005275	0.06017	-0.09344	-0.1842
6	-0.009463	-0.05873	-0.06876	-0.06528	-0.1347	1.000	-0.04842	0.03359	-0.02423	0.02410
7	0.4871	-0.07191	0.2085	0.06419	-0.005275	-0.04842	1.000	0.1610	-0.03291	0.08523
8	0.1303	0.03815	0.1646	-0.09959	0.06017	0.03359	0.1610	1.000	-0.04491	0.1548
9	-0.01061	0.08626	-0.04342	0.1205	-0.09344	-0.02423	-0.03291	-0.04491	1.000	-0.05528
10	0.03711	0.06776	0.02450	0.09211	-0.1842	0.02410	0.08523	0.1548	-0.05528	1.000

Monthly subscription / Pricing

Monthly subscription	\$760
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* Monthly portfolio subscription price is cca equal to 10% of average monthly profit based on modeled historical performance

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