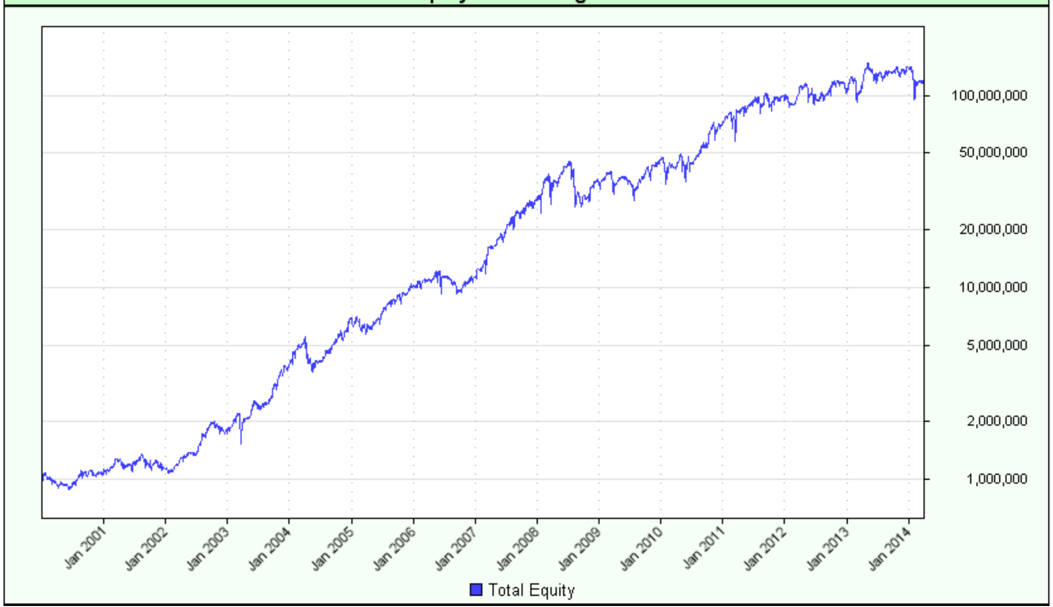
Summary Test Results

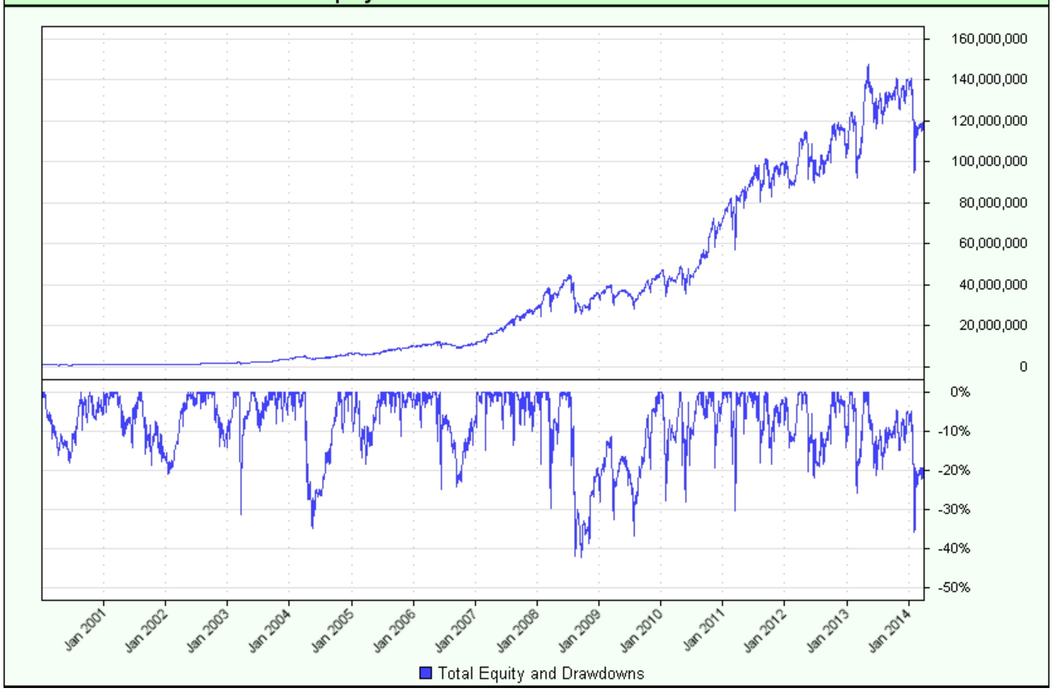
Stepped Parameter Summary Performance

Test	Ending Balance	CAGR%	MAR	Modified Sharpe	Annual Sharpe	Max Total Equity DD	Longest Drawdown	# Trades	Avg Margin/Equity
1	117,195,964.98	39.72%	0.94	1.27	0.81	42.2%	17.2	6,921	0.16

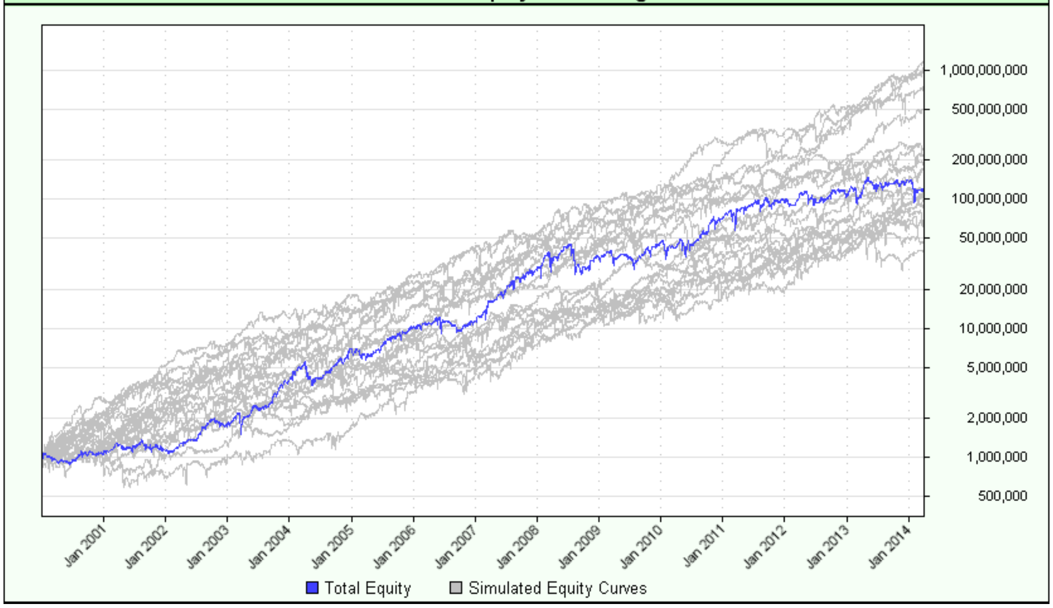
Equity Curve - Log Scale



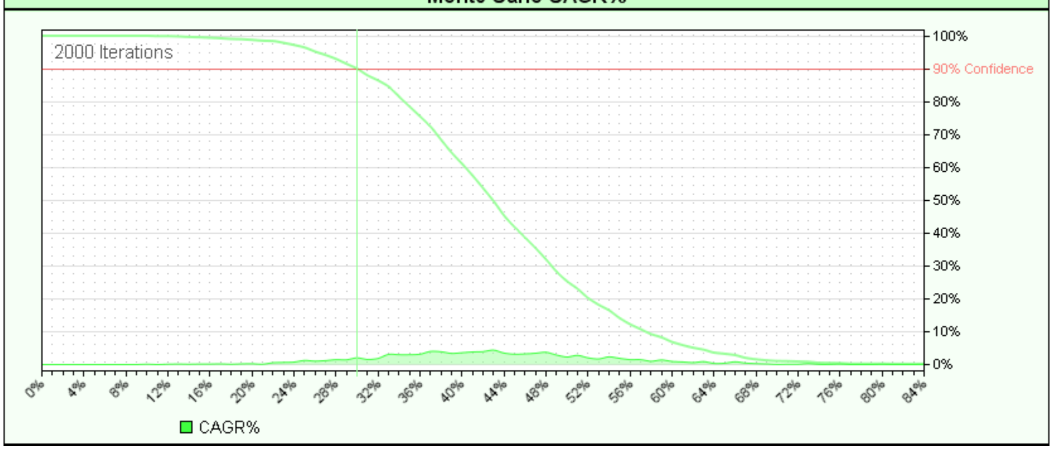
Equity Curve - Linear Scale with Drawdowns



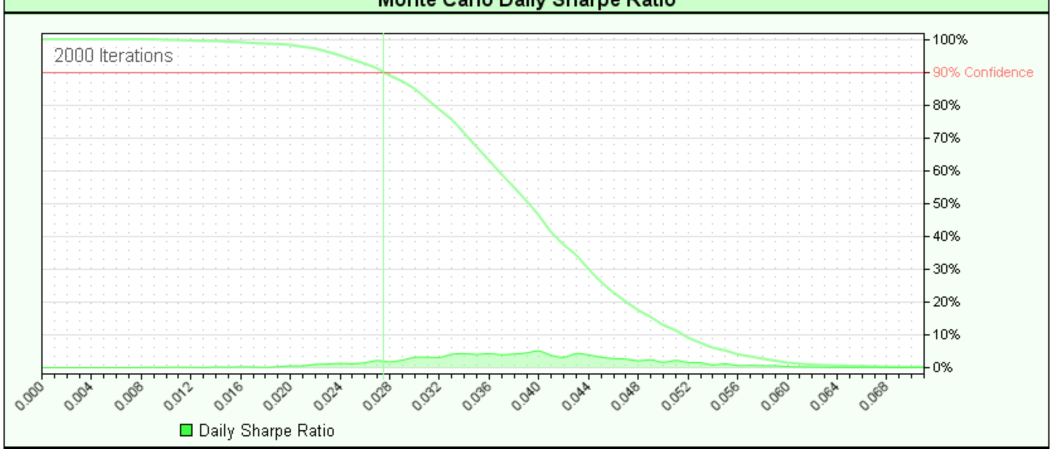
Monte Carlo Equity Curve - Log Scale

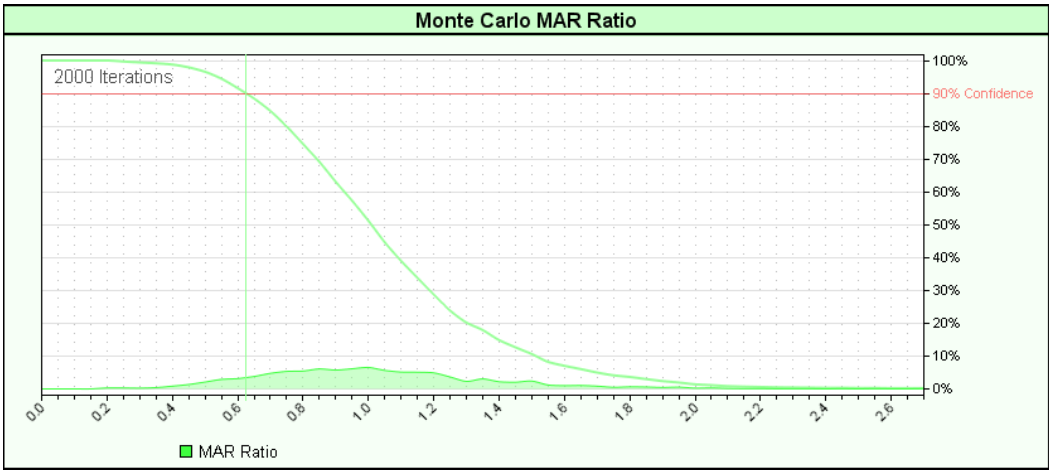


Monte Carlo CAGR%

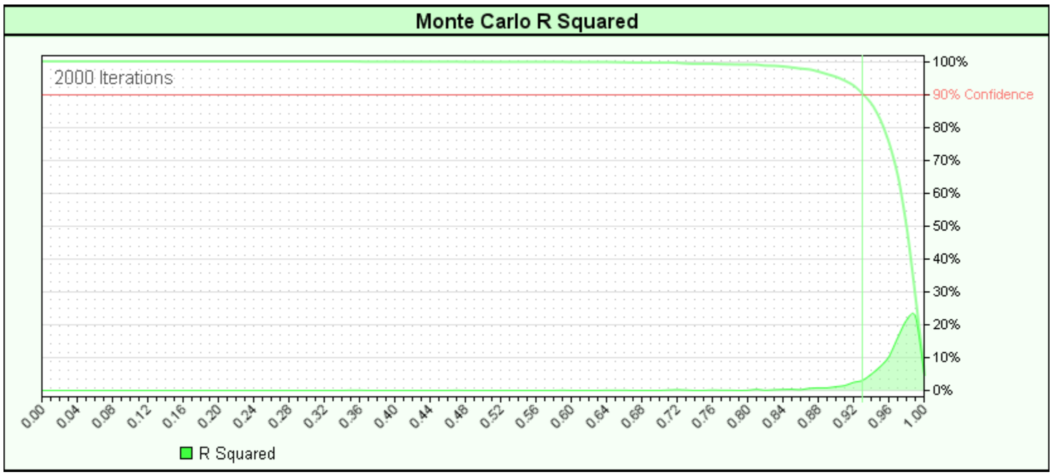


Monte Carlo Daily Sharpe Ratio

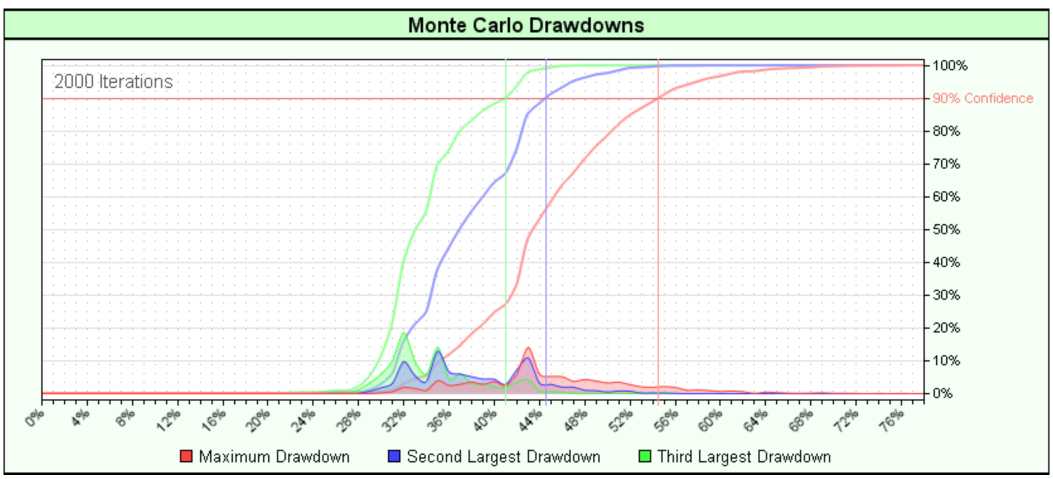




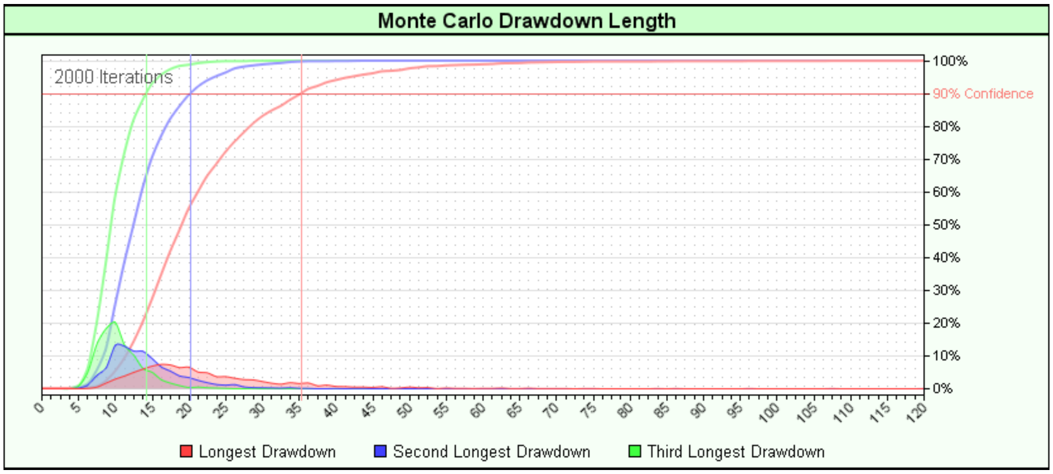
Monte Carlo MAR Ratio
2000 Iterations
100%
90% Confidence
80%
70%
60%
50%
40%
30%
20%
10%
0%
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
MAR Ratio

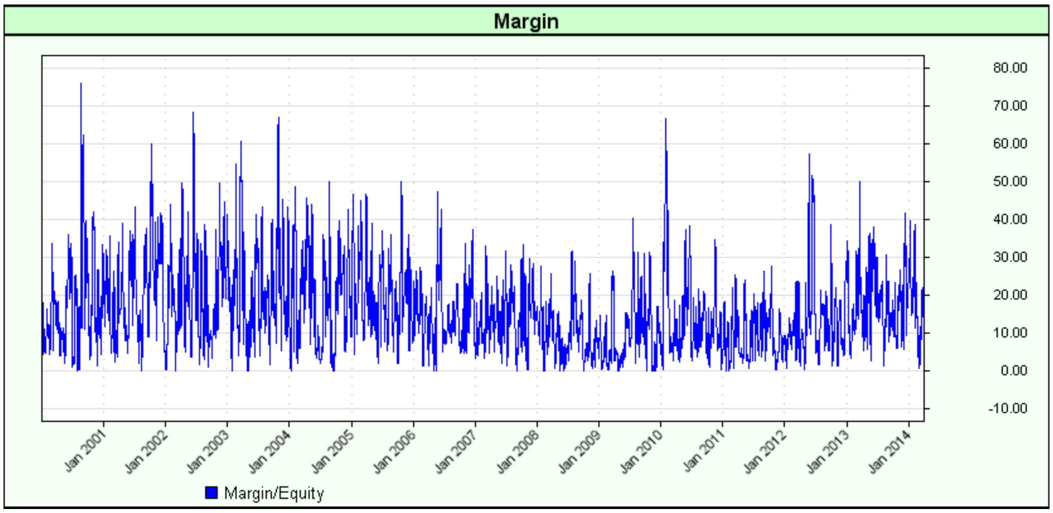


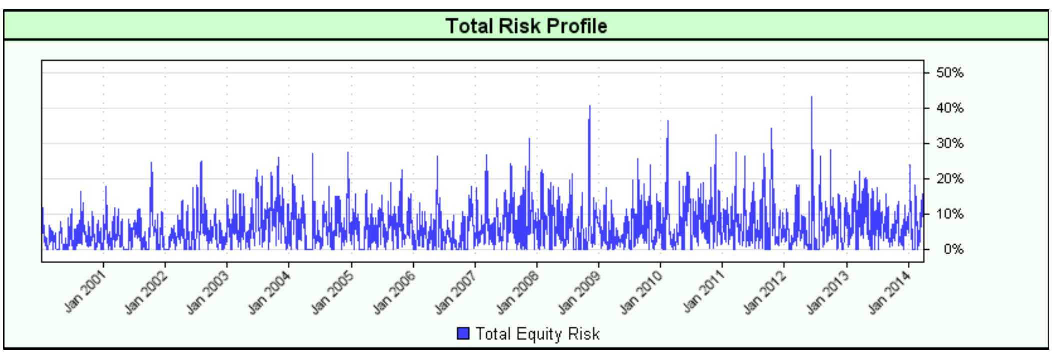
Monte Carlo R Squared
2000 Iterations
100%
90% Confidence
80%
70%
60%
50%
40%
30%
20%
10%
0%
0.00
0.04
0.08
0.12
0.16
0.20
0.24
0.28
0.32
0.36
0.40
0.44
0.48
0.52
0.56
0.60
0.64
0.68
0.72
0.76
0.80
0.84
0.88
0.92
0.96
1.00
R Squared

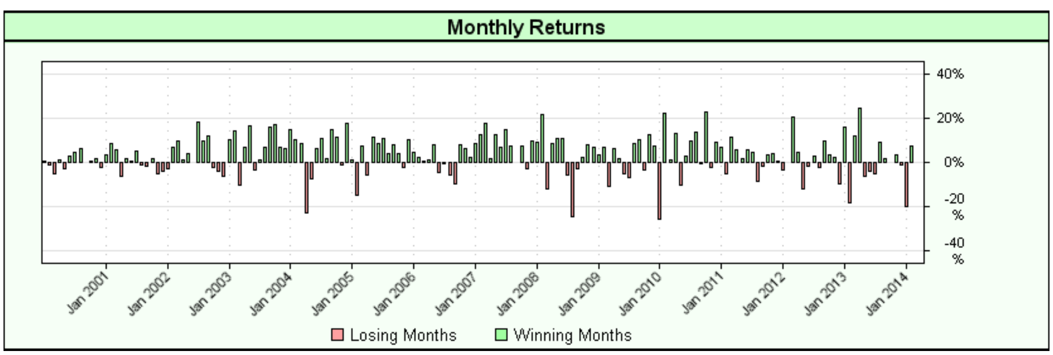


Monte Carlo Drawdowns
2000 Iterations
100%
90% Confidence
80%
70%
60%
50%
40%
30%
20%
10%
0%
0%
4%
8%
12%
16%
20%
24%
28%
32%
36%
40%
44%
48%
52%
56%
60%
64%
68%
72%
76%
Maximum Drawdown
Second Largest Drawdown
Third Largest Drawdown

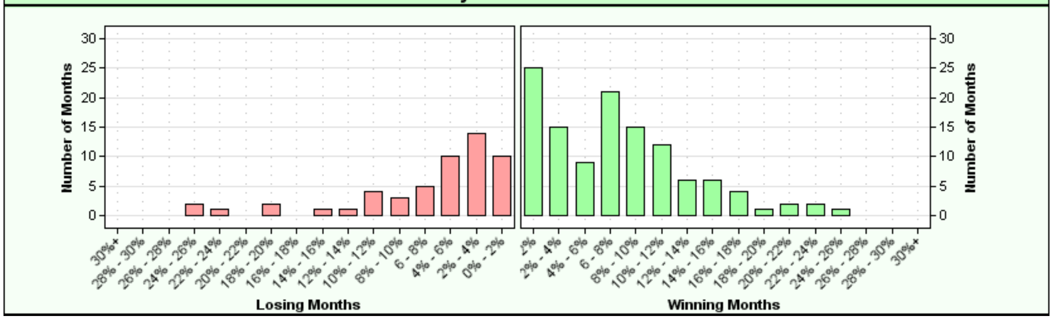

Monte Carlo Drawdown Length
2000 Iterations
90% Confidence
Longest Drawdown
Second Longest Drawdown
Third Longest Drawdown


Margin
Margin/Equity

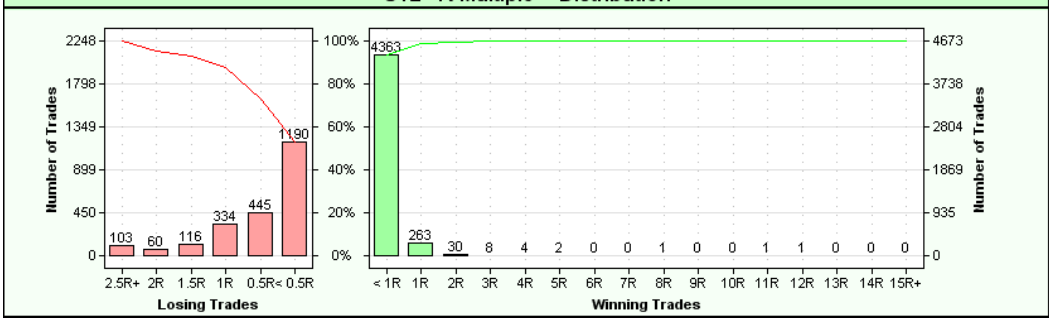

Total Risk Profile
Total Equity Risk


Monthly Returns
Losing Months
Winning Months

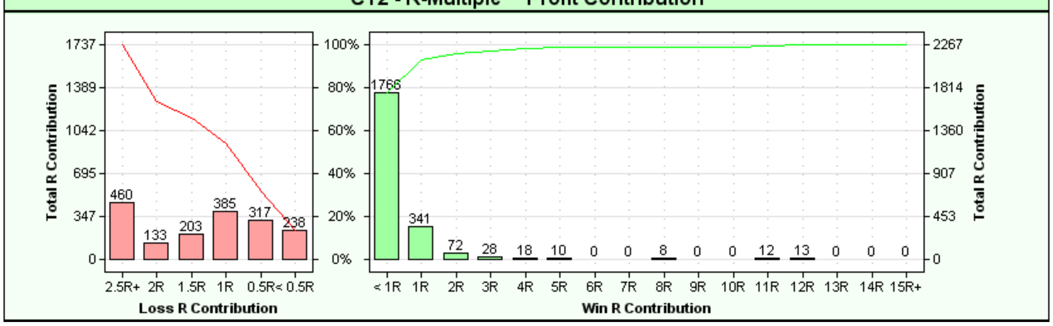
Monthly Return Distribution



CT2 - R-Multiple™ Distribution



CT2 - R-Multiple™ Profit Contribution



Yearly Performance Summary

Year	Days	Closed Balance	End Total Equity	Total Equity Gain	Gain %	# Trades
2000	364	1,072,790.23	1,053,708.95	53,708.95	5.4%	330
2001	365	1,184,274.62	1,132,784.72	79,075.77	7.5%	414
2002	365	1,823,534.14	1,729,659.91	596,875.19	52.7%	363
2003	365	4,078,215.24	3,947,056.61	2,217,396.70	128.2%	529
2004	366	7,024,271.57	6,901,646.86	2,954,590.25	74.9%	501
2005	365	10,372,628.68	10,155,158.68	3,253,511.82	47.1%	483
2006	365	11,453,660.20	11,267,255.06	1,112,096.39	11.0%	414
2007	365	29,693,960.20	28,120,911.86	16,853,656.80	149.6%	515
2008	366	37,136,716.25	35,266,106.69	7,145,194.83	25.4%	580
2009	365	46,470,829.17	46,413,957.01	11,147,850.32	31.6%	417
2010	365	72,018,543.15	72,494,285.11	26,080,328.10	56.2%	625
2011	365	100,984,463.97	94,572,759.40	22,078,474.29	30.5%	537
2012	366	115,538,733.41	105,684,282.08	11,111,522.69	11.7%	458
2013	365	144,387,966.56	135,576,363.85	29,892,081.77	28.3%	609
2014	91	117,195,964.98	117,195,964.98	-18,380,398.87	-13.6%	146

Instrument Performance Summary

Symbol	Wins	%	Losses	%	Trades	Win Months	%	Loss Months	%	Avg. Win %	Avg. Loss %	Avg. Trade %	% Proft Factor
AD	42	63.6%	24	36.4%	66	144	83.7%	28	16.3%	0.33%	0.82%	-0.08%	0.72
AEX	51	72.9%	19	27.1%	70	148	86.0%	24	14.0%	0.48%	0.59%	0.19%	2.19
ALS	42	62.7%	25	37.3%	67	142	82.6%	30	17.4%	0.54%	0.48%	0.16%	1.88
BL2	49	61.3%	31	38.8%	80	138	80.2%	34	19.8%	0.46%	0.77%	-0.01%	0.95
BO2	36	72.0%	14	28.0%	50	155	90.1%	17	9.9%	0.40%	0.70%	0.09%	1.48
BP	42	63.6%	24	36.4%	66	145	84.3%	27	15.7%	0.41%	0.69%	0.01%	1.02

C2	39	61.9%	24	38.1%	63	142	82.6%	30	17.4%	0.43%	0.72%	-0.01%	0.98
CC2	37	63.8%	21	36.2%	58	145	84.3%	27	15.7%	0.45%	0.84%	-0.02%	0.94
CD	37	67.3%	18	32.7%	55	150	87.2%	22	12.8%	0.44%	0.35%	0.18%	2.59
CGB	58	70.7%	24	29.3%	82	145	84.3%	27	15.7%	0.43%	0.58%	0.13%	1.77
CL2	59	77.6%	17	22.4%	76	146	84.9%	26	15.1%	0.43%	0.53%	0.21%	2.78
CON	42	60.0%	28	40.0%	70	132	76.7%	40	23.3%	0.43%	1.10%	-0.18%	0.59
CT2	38	54.3%	32	45.7%	70	145	84.3%	27	15.7%	0.47%	0.77%	-0.09%	0.73
CU	47	65.3%	25	34.7%	72	142	82.6%	30	17.4%	0.40%	0.47%	0.10%	1.60
DA	53	62.4%	32	37.6%	85	142	82.6%	30	17.4%	0.47%	0.78%	0.00%	1.00
DA2	59	69.4%	26	30.6%	85	142	82.6%	30	17.4%	0.54%	0.83%	0.12%	1.49
DX2	34	68.0%	16	32.0%	50	153	89.0%	19	11.0%	0.44%	0.40%	0.17%	2.34
EBL	54	67.5%	26	32.5%	80	143	83.1%	29	16.9%	0.42%	0.77%	0.04%	1.14
EBM	51	65.4%	27	34.6%	78	146	84.9%	26	15.1%	0.41%	0.58%	0.07%	1.35
EBX	31	66.0%	16	34.0%	47	153	89.0%	19	11.0%	0.54%	0.88%	0.06%	1.20
ES	54	80.6%	13	19.4%	67	159	92.4%	13	7.6%	0.47%	0.37%	0.31%	5.26
EX	47	70.1%	20	29.9%	67	146	84.9%	26	15.1%	0.42%	0.46%	0.16%	2.13
FC	52	63.4%	30	36.6%	82	141	82.0%	31	18.0%	0.45%	0.70%	0.03%	1.10
FCH	40	80.0%	10	20.0%	50	160	93.0%	12	7.0%	0.48%	0.48%	0.28%	3.96
FDX	52	78.8%	14	21.2%	66	156	90.7%	16	9.3%	0.40%	0.24%	0.26%	6.09
FFI	34	68.0%	16	32.0%	50	153	89.0%	19	11.0%	0.42%	0.58%	0.10%	1.55
FV	72	78.3%	20	21.7%	92	151	87.8%	21	12.2%	0.45%	0.76%	0.18%	2.12
GC2	51	69.9%	22	30.1%	73	141	82.0%	31	18.0%	0.38%	0.46%	0.13%	1.95
GOC	19	57.6%	14	42.4%	33	152	88.4%	20	11.6%	0.45%	0.40%	0.09%	1.51
HG2	43	74.1%	15	25.9%	58	152	88.4%	20	11.6%	0.47%	0.65%	0.18%	2.07
HMH	33	68.8%	15	31.3%	48	156	90.7%	16	9.3%	0.58%	0.57%	0.22%	2.25
HO2	51	76.1%	16	23.9%	67	148	86.0%	24	14.0%	0.51%	0.76%	0.20%	2.13
HSI	36	65.5%	19	34.5%	55	149	86.6%	23	13.4%	0.56%	0.58%	0.16%	1.81
ICL	29	78.4%	8	21.6%	37	159	92.4%	13	7.6%	0.42%	0.64%	0.19%	2.38
IFM	33	71.7%	13	28.3%	46	157	91.3%	15	8.7%	0.56%	0.51%	0.26%	2.79
IR	44	77.2%	13	22.8%	57	158	91.9%	14	8.1%	0.49%	1.05%	0.14%	1.57
JA4	10	58.8%	7	41.2%	17	162	94.2%	10	5.8%	0.31%	0.61%	-0.07%	0.73
JAC	21	60.0%	14	40.0%	35	158	91.9%	14	8.1%	0.88%	0.92%	0.16%	1.43
JAS	30	61.2%	19	38.8%	49	155	90.1%	17	9.9%	0.51%	0.75%	0.02%	1.08
JAU	28	59.6%	19	40.4%	47	148	86.0%	24	14.0%	0.63%	0.67%	0.10%	1.38
JC2	12	66.7%	6	33.3%	18	164	95.3%	8	4.7%	0.39%	0.83%	-0.02%	0.94
JCR	22	48.9%	23	51.1%	45	147	85.5%	25	14.5%	0.46%	0.64%	-0.11%	0.68
JG4	11	64.7%	6	35.3%	17	165	95.9%	7	4.1%	0.45%	0.56%	0.09%	1.46
JK2	14	70.0%	6	30.0%	20	164	95.3%	8	4.7%	0.42%	0.43%	0.17%	2.30
JP2	11	57.9%	8	42.1%	19	163	94.8%	9	5.2%	0.40%	0.70%	-0.06%	0.79
JP4	11	55.0%	9	45.0%	20	161	93.6%	11	6.4%	0.41%	0.69%	-0.09%	0.72
JP6	11	61.1%	7	38.9%	18	169	98.3%	3	1.7%	0.50%	0.33%	0.18%	2.40
JR2	13	76.5%	4	23.5%	17	166	96.5%	6	3.5%	0.57%	1.46%	0.10%	1.28
JRU	33	58.9%	23	41.1%	56	141	82.0%	31	18.0%	0.68%	1.19%	-0.09%	0.82
JS2	12	80.0%	3	20.0%	15	168	97.7%	4	2.3%	0.30%	1.06%	0.03%	1.12
JS4	4	50.0%	4	50.0%	8	165	95.9%	7	4.1%	0.65%	1.35%	-0.35%	0.48
JT	37	72.5%	14	27.5%	51	153	89.0%	19	11.0%	0.42%	0.51%	0.16%	2.17
JTI	51	77.3%	15	22.7%	66	154	89.5%	18	10.5%	0.49%	0.43%	0.28%	3.85
JY	43	68.3%	20	31.7%	63	145	84.3%	27	15.7%	0.39%	0.61%	0.07%	1.35
KC	39	70.9%	16	29.1%	55	154	89.5%	18	10.5%	0.46%	0.91%	0.06%	1.22
KLI	44	57.9%	32	42.1%	76	137	79.7%	35	20.3%	0.42%	0.62%	-0.02%	0.93
KPO	48	64.9%	26	35.1%	74	140	81.4%	32	18.6%	0.44%	0.93%	-0.04%	0.88
KW	34	61.8%	21	38.2%	55	148	86.0%	24	14.0%	0.44%	0.55%	0.07%	1.32
LB	40	62.5%	24	37.5%	64	138	80.2%	34	19.8%	0.57%	0.93%	0.01%	1.02
LC	40	71.4%	16	28.6%	56	152	88.4%	20	11.6%	0.40%	0.47%	0.15%	2.09
LCC	35	59.3%	24	40.7%	59	144	83.7%	28	16.3%	0.48%	0.74%	-0.02%	0.94
LCO	59	71.1%	24	28.9%	83	141	82.0%	31	18.0%	0.48%	1.17%	0.00%	1.01
LGO	46	71.9%	18	28.1%	64	152	88.4%	20	11.6%	0.47%	0.73%	0.13%	1.65
LH	32	65.3%	17	34.7%	49	150	87.2%	22	12.8%	0.45%	0.64%	0.08%	1.34
LRC	54	69.2%	24	30.8%	78	146	84.9%	26	15.1%	0.47%	0.85%	0.06%	1.24
LSU	54	63.5%	31	36.5%	85	140	81.4%	32	18.6%	0.44%	1.07%	-0.11%	0.72
LWB	45	60.8%	29	39.2%	74	142	82.6%	30	17.4%	0.64%	0.65%	0.13%	1.52
M6A	8	61.5%	5	38.5%	13	167	97.1%	5	2.9%	0.34%	0.73%	-0.07%	0.74
M6B	8	57.1%	6	42.9%	14	165	95.9%	7	4.1%	0.23%	0.74%	-0.19%	0.41
M6E	13	61.9%	8	38.1%	21	162	94.2%	10	5.8%	0.32%	0.63%	-0.04%	0.82
MFX	44	72.1%	17	27.9%	61	155	90.1%	17	9.9%	0.48%	0.71%	0.14%	1.73
MP	47	67.1%	23	32.9%	70	150	87.2%	22	12.8%	0.47%	0.53%	0.14%	1.80
MW	33	58.9%	23	41.1%	56	144	83.7%	28	16.3%	0.47%	0.83%	-0.06%	0.81
MXM2	13	59.1%	9	40.9%	22	162	94.2%	10	5.8%	0.46%	0.47%	0.08%	1.44
ND	46	82.1%	10	17.9%	56	162	94.2%	10	5.8%	0.40%	0.29%	0.28%	6.44

	40	65.6%	21	34.4%	61	149	86.6%	23	13.4%	0.40%	0.82%	-0.02%	0.94
NG2	45	77.6%	13	22.4%	58	155	90.1%	17	9.9%	0.46%	0.75%	0.19%	2.12
NK	42	70.0%	18	30.0%	60	150	87.2%	22	12.8%	0.46%	0.35%	0.22%	3.09
NQ	49	81.7%	11	18.3%	60	162	94.2%	10	5.8%	0.43%	0.36%	0.28%	5.29
O2	49	67.1%	24	32.9%	73	143	83.1%	29	16.9%	0.37%	0.71%	0.01%	1.06
OJ2	39	57.4%	29	42.6%	68	142	82.6%	30	17.4%	0.63%	0.78%	0.03%	1.10
PA2	46	61.3%	29	38.7%	75	136	79.1%	36	20.9%	0.53%	0.84%	-0.00%	0.99
PL2	41	62.1%	25	37.9%	66	140	81.4%	32	18.6%	0.46%	0.56%	0.07%	1.34
QCC	17	70.8%	7	29.2%	24	164	95.3%	8	4.7%	0.42%	0.66%	0.11%	1.55
QG	29	72.5%	11	27.5%	40	156	90.7%	16	9.3%	0.46%	0.85%	0.10%	1.42
QIC	28	87.5%	4	12.5%	32	165	95.9%	7	4.1%	0.47%	0.84%	0.31%	3.97
QM	43	75.4%	14	24.6%	57	150	87.2%	22	12.8%	0.41%	0.58%	0.17%	2.18
RB2	57	75.0%	19	25.0%	76	151	87.8%	21	12.2%	0.51%	0.64%	0.22%	2.39
RP	28	60.9%	18	39.1%	46	151	87.8%	21	12.2%	0.41%	0.54%	0.04%	1.17
RR2	34	54.0%	29	46.0%	63	137	79.7%	35	20.3%	0.50%	0.87%	-0.13%	0.68
RS	47	68.1%	22	31.9%	69	147	85.5%	25	14.5%	0.41%	0.85%	0.01%	1.04
RY	31	64.6%	17	35.4%	48	154	89.5%	18	10.5%	0.44%	0.61%	0.07%	1.32
S2	46	68.7%	21	31.3%	67	150	87.2%	22	12.8%	0.47%	1.01%	0.01%	1.02
SB	49	67.1%	24	32.9%	73	141	82.0%	31	18.0%	0.46%	0.87%	0.02%	1.07
SF	49	68.1%	23	31.9%	72	141	82.0%	31	18.0%	0.39%	0.58%	0.08%	1.45
SI2	49	65.3%	26	34.7%	75	144	83.7%	28	16.3%	0.40%	0.62%	0.04%	1.21
SIN	45	70.3%	19	29.7%	64	151	87.8%	21	12.2%	0.62%	0.85%	0.18%	1.71
SJB	61	67.8%	29	32.2%	90	139	80.8%	33	19.2%	0.41%	0.77%	0.03%	1.13
SM2	61	72.6%	23	27.4%	84	143	83.1%	29	16.9%	0.39%	0.97%	0.02%	1.06
SSG2	30	57.7%	22	42.3%	52	144	83.7%	28	16.3%	0.46%	1.09%	-0.19%	0.58
STW	46	71.9%	18	28.1%	64	143	83.1%	29	16.9%	0.40%	0.56%	0.13%	1.81
SUF	29	64.4%	16	35.6%	45	150	87.2%	22	12.8%	0.59%	1.24%	-0.06%	0.86
SXE	43	76.8%	13	23.2%	56	159	92.4%	13	7.6%	0.41%	0.37%	0.23%	3.74
SXF	41	71.9%	16	28.1%	57	154	89.5%	18	10.5%	0.41%	0.31%	0.21%	3.41
TF	47	82.5%	10	17.5%	57	158	91.9%	14	8.1%	0.45%	0.26%	0.32%	8.11
TU2	49	59.0%	34	41.0%	83	142	82.6%	30	17.4%	0.42%	0.43%	0.07%	1.40
TY	68	71.6%	27	28.4%	95	144	83.7%	28	16.3%	0.42%	0.64%	0.12%	1.67
UL2	10	76.9%	3	23.1%	13	168	97.7%	4	2.3%	0.43%	0.74%	0.16%	1.92
US	59	67.0%	29	33.0%	88	143	83.1%	29	16.9%	0.38%	0.57%	0.06%	1.33
W	32	64.0%	18	36.0%	50	152	88.4%	20	11.6%	0.39%	0.45%	0.09%	1.58
WSA	18	56.3%	14	43.8%	32	155	90.1%	17	9.9%	0.48%	0.72%	-0.05%	0.86
XC2	13	59.1%	9	40.9%	22	162	94.2%	10	5.8%	0.54%	0.87%	-0.03%	0.90
XGN	0	0.0%	1	100.0%	1	171	99.4%	1	0.6%	0.00%	0.83%	-0.83%	0.00
XS2	19	70.4%	8	29.6%	27	165	95.9%	7	4.1%	0.37%	1.00%	-0.03%	0.88
XW2	35	67.3%	17	32.7%	52	152	88.4%	20	11.6%	0.45%	0.58%	0.12%	1.61
YAP	67	76.1%	21	23.9%	88	149	86.6%	23	13.4%	0.41%	0.72%	0.14%	1.80
YBA	36	50.0%	36	50.0%	72	128	74.4%	44	25.6%	0.27%	0.62%	-0.18%	0.43
YG	51	65.4%	27	34.6%	78	135	78.5%	37	21.5%	0.38%	0.50%	0.08%	1.45
YI	48	66.7%	24	33.3%	72	149	86.6%	23	13.4%	0.43%	0.67%	0.06%	1.28
YM	59	75.6%	19	24.4%	78	143	83.1%	29	16.9%	0.45%	0.62%	0.19%	2.28
YTC	45	64.3%	25	35.7%	70	142	82.6%	30	17.4%	0.36%	0.63%	0.01%	1.03
YTT	56	66.7%	28	33.3%	84	143	83.1%	29	16.9%	0.35%	0.54%	0.05%	1.27

Test Period for parameter run 1.

First Test Date	2000-01-03
Last Test Date	2014-04-01

Trading Performance

CAGR %	39.72%
MAR Ratio	0.94
RAR %	49.46%
R-Cubed	2.32
Robust Sharpe Ratio	1.63
Margin to Equity Ratio	15.82%
Daily Return %	0.1546%
Daily Geometric Return %	0.0916%
Daily Standard Deviation %	2.30%
Daily Downside Deviation %	1.74%
Daily Sharpe	0.064
Daily Geo Sharpe	0.036
Daily Sortino	0.084
Modified Sharpe Ratio	1.27
Annual Sharpe Ratio	0.81

Win/Loss Statistics

Wins	4673	67.5%
Losses	2248	32.5%
Total	6921	100.0%
Winning Months	119	69.2%
Losing Months	53	30.8%
Total	172	100.0%
Average Risk Percent		1.00%
Average Win Percent		0.45%
Average Loss Percent		0.69%
Average Win Dollars		170,589.91
Average Loss Dollars		302,922.90
Average Trade Percent		0.08%
Average Trade Duration		7.93
Average Trade Dollars		16,788.90

Annual Sortino Ratio	+ ∞
Monthly Sharpe Ratio	0.34
Monthly Sortino Ratio	0.48
Calmar Ratio	1.28
R-Squared	0.979
Maximum Total Equity Drawdown %	42.15%
Longest Total Equity Drawdown (months)	17.18
Average Max TE Drawdown %	34.85%
Average Max TE Drawdown Length (months)	10.28
Maximum Monthly Total Equity Drawdown %	31.12%
Maximum Monthly Closed Equity Drawdown %	32.22%
Maximum Closed Equity Drawdown %	38.92%
Average Closed Equity Drawdown %	2.28%
Round Turns Per Million	6,114
Round Turns	3,066,681
Total Trades	6,921
Start Account Balance	1,000,000.00
Total Win Dollars	797,166,643.53
Total Loss Dollars	680,970,678.54
Total Profit	116,195,964.98
Earned Interest	0.00
Margin Interest	0.00
End Account Balance	117,195,964.98
End Open Equity	0.00
End Total Equity	117,195,964.98
Highest Total Equity	147,768,842.64
Highest Closed Equity	156,090,876.83
Total Commissions	30,666,810.00
Commission per Round Turn	10.00
Total Slippage	98,370,378.05
Slippage per Round Turn	32.08
Total Forex Carry	0.00
Total Dividends	0.00
Total Other Expenses	0.00

Custom Statistics

Avg Margin/Equity	0.16

Profit Factor	1.17
Percent Profit Factor	1.36
Expectation	0.08

Equity Management

Test Starting Equity	1,000,000.00
Order Generation Equity	0.00
Order Generation Equity High	0.00
Leverage (fraction)	1.00
Trading Equity Base	Total Equity
Drawdown Reduction Threshold (%)	100.00%
Drawdown Reduction Amount (%)	0.00%

Global Simulation Parameters

Earn Interest	FALSE
Earn Dividends	FALSE
Pay Margin on Stocks	FALSE
Commission per Stock Trade	0.00
Commission per Stock Share	0.00
Commission per Contract	10.00
Commission by Stock Value (%)	0.00%
Slippage Percent	5.00%
Minimum Slippage	0.00
Forex Trade Size	0.00
Account for Forex Carry	FALSE
Use Pip Based Slippage	FALSE
Account for Contract Rolls	TRUE
Roll Slippage in % of ATR	3.00%
Minimum Stock Volume	0
Minimum Futures Volume	0
Max Percent Volume Per Trade	0.00%
Entry Day Retracement	0.00%
Max Margin Equity	100.00%
Trade on Lock Days	TRUE
Convert Profit by Stock Split	FALSE
Trade Always on Tick	TRUE
Smart Fill Exit	TRUE
Use Start Date Stepping	FALSE
Use Broker Positions	FALSE

Preferences

Risk Free Rate	3.00%
Load Volume	TRUE
Load Unadjusted Close	TRUE
Raise Negative Data	FALSE
Process Weekly Bars	TRUE
Process Monthly Bars	TRUE
Process Daily Bars	TRUE
Process Weekends	TRUE
Additional Years of Data	5.00

Disclaimer

Hypothetical performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. in fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. 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.