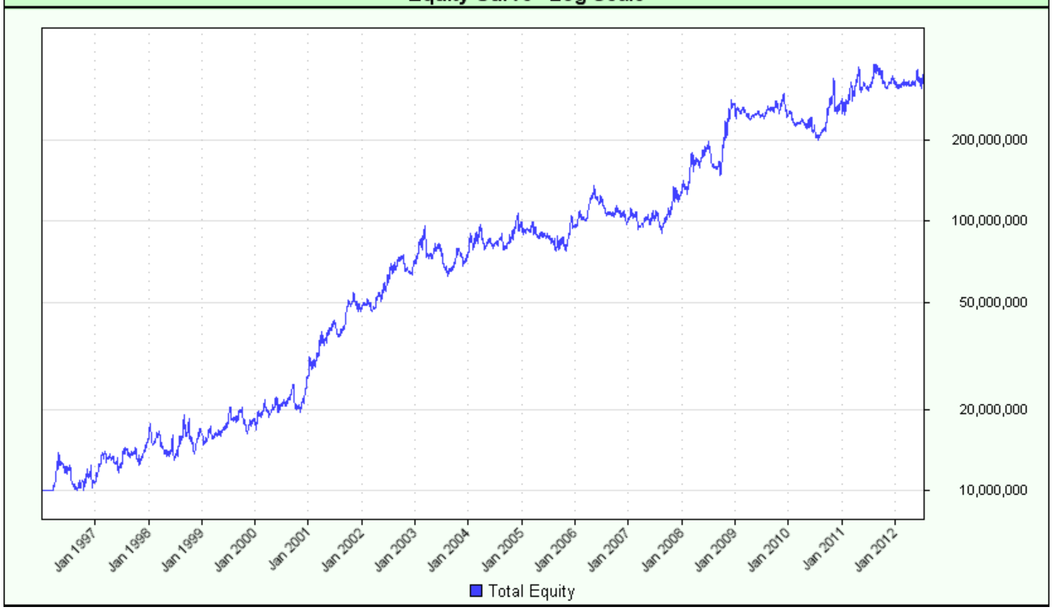
Summary Test Results

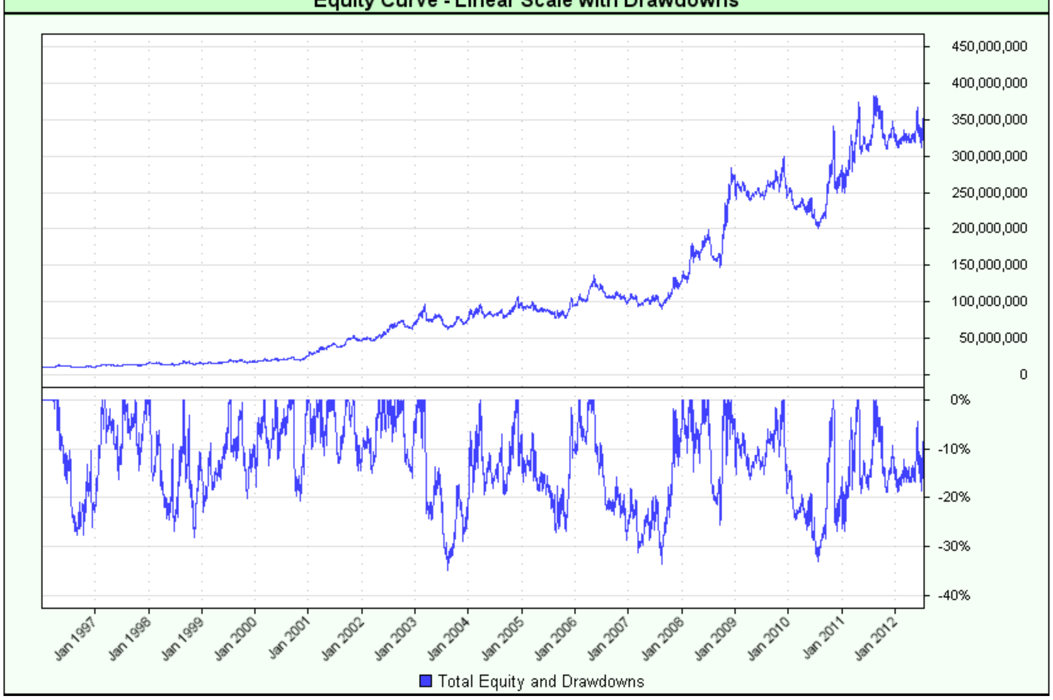
Stepped Parameter Summary Performance

Test	Ending Balance	CAGR%	MAR	Modified Sharpe	Annual Sharpe	Max Total Equity DD	Longest Drawdown	# Trades
1	355,087,249.94	24.08%	0.69	0.87	0.70	34.9%	19.7	1,258

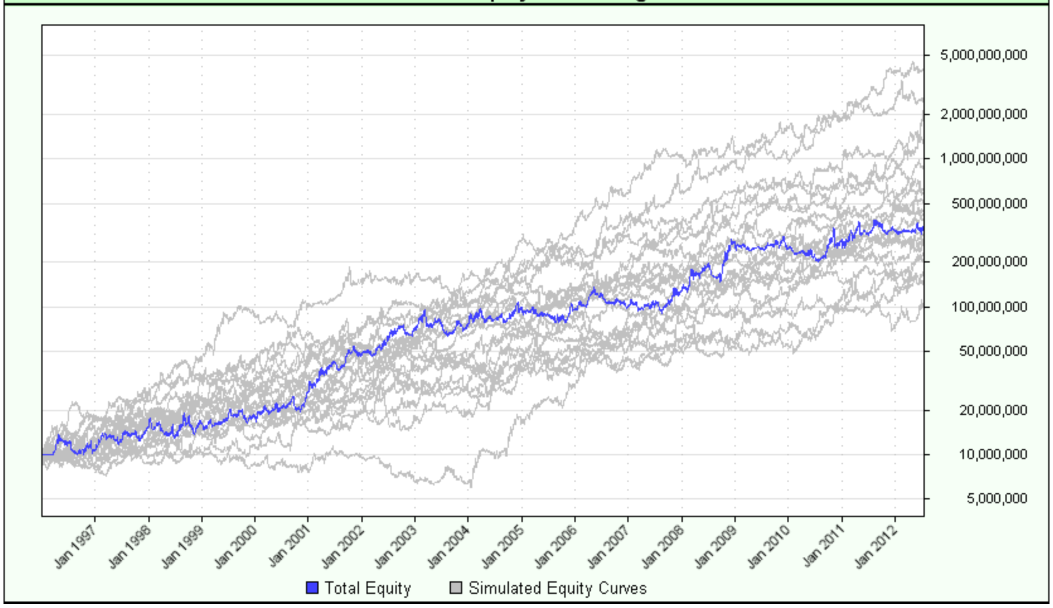
Equity Curve - Log Scale



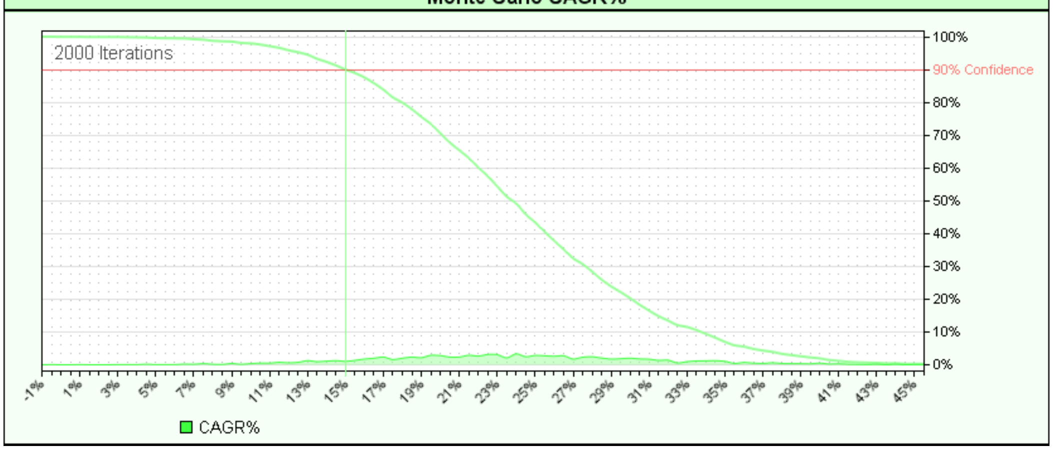
Equity Curve - Linear Scale with Drawdowns



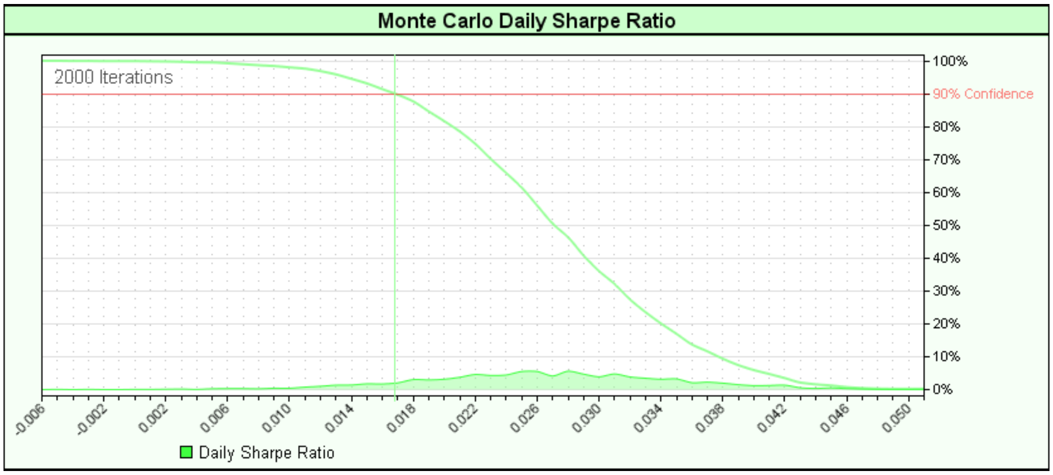
Monte Carlo Equity Curve - Log Scale



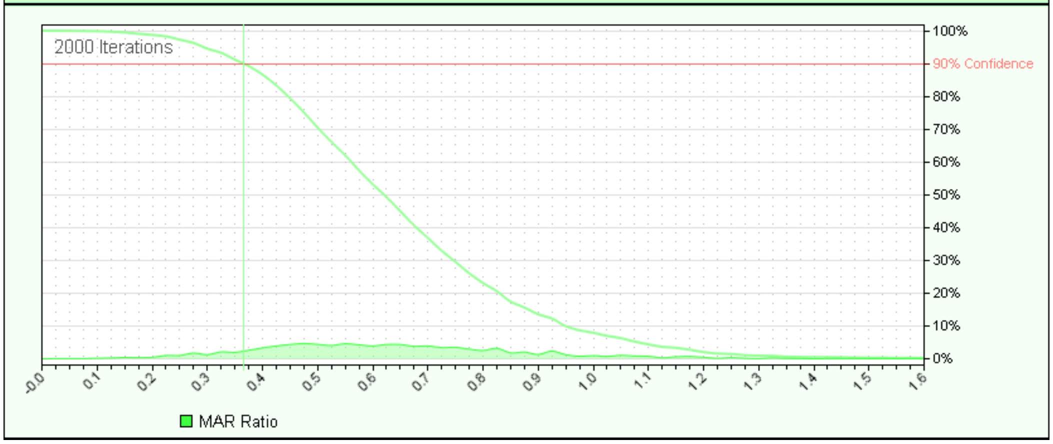
Monte Carlo CAGR%



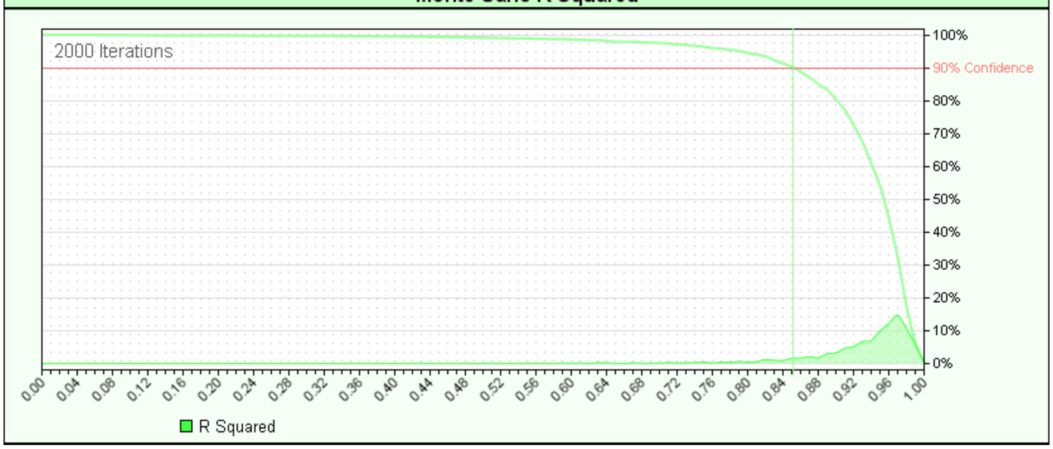
Monte Carlo Daily Sharpe Ratio



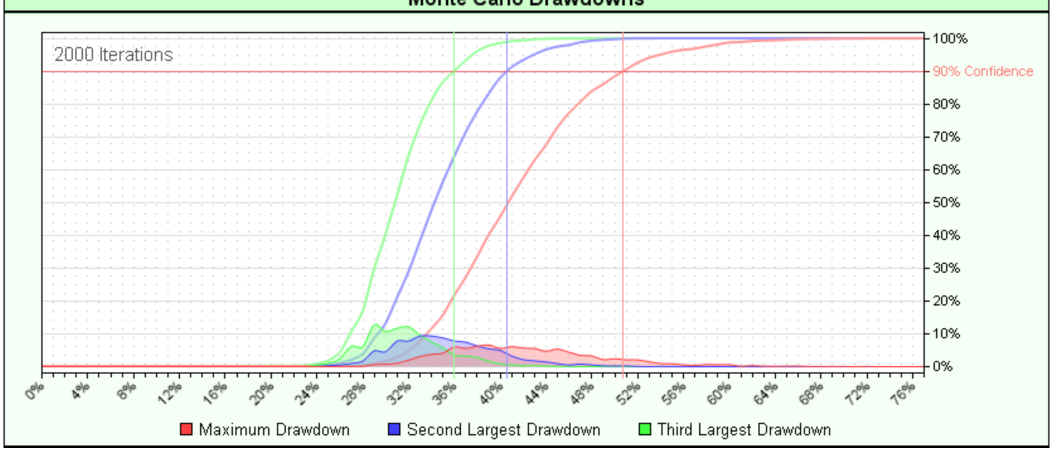
Monte Carlo MAR Ratio



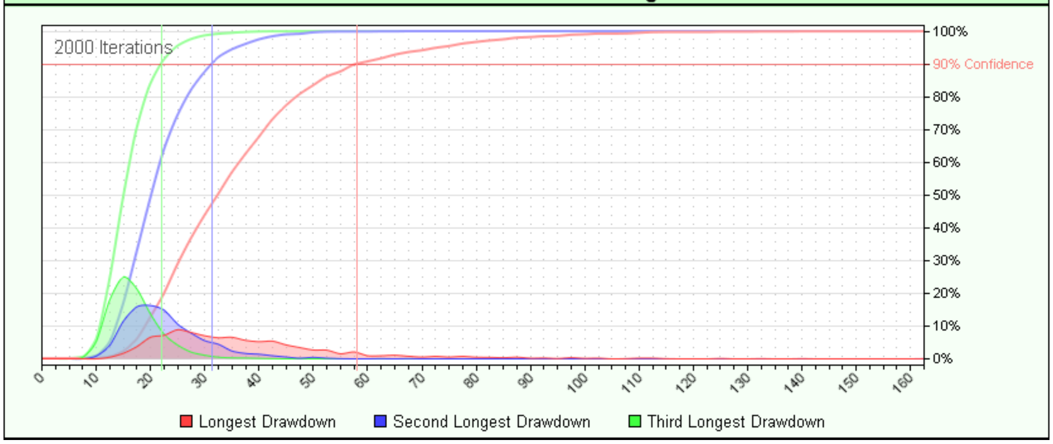
Monte Carlo R Squared



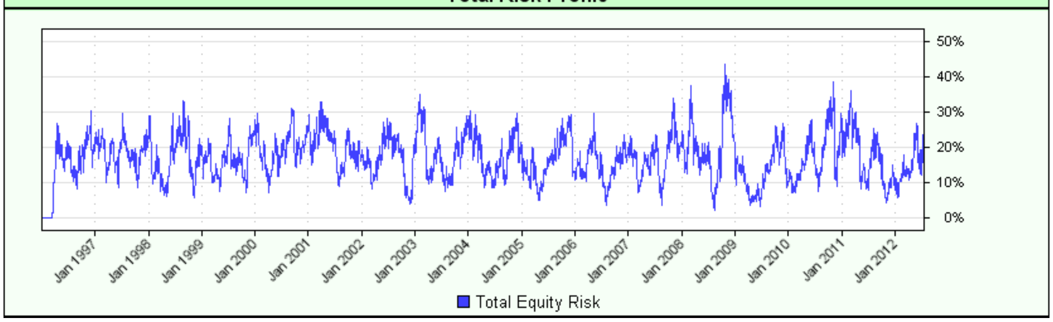
Monte Carlo Drawdowns



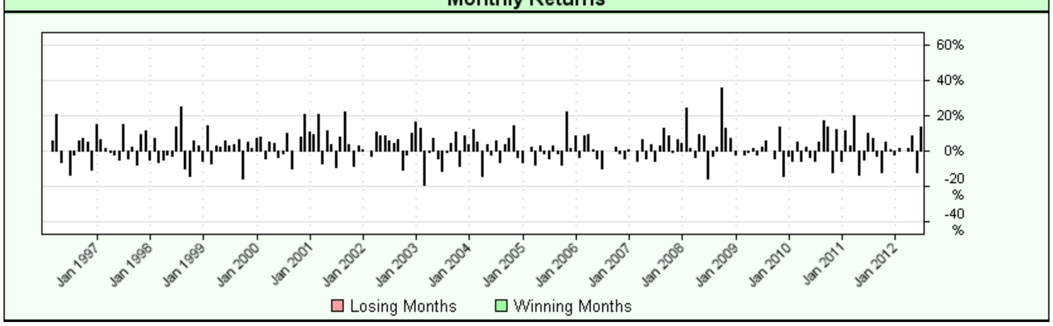
Monte Carlo Drawdown Length



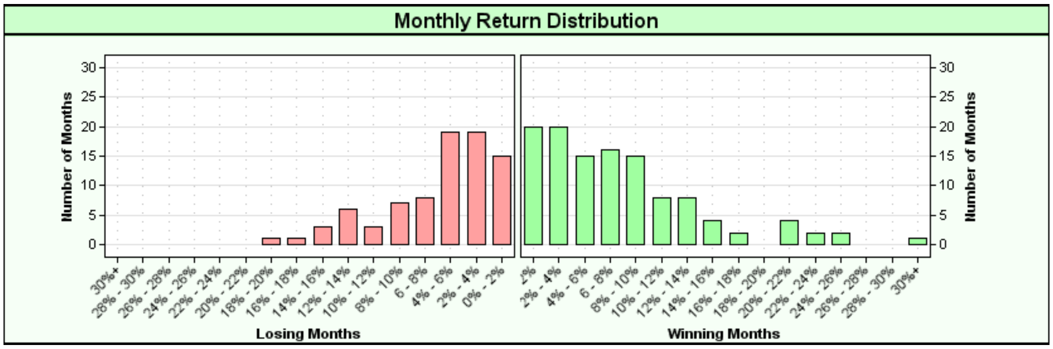
Total Risk Profile

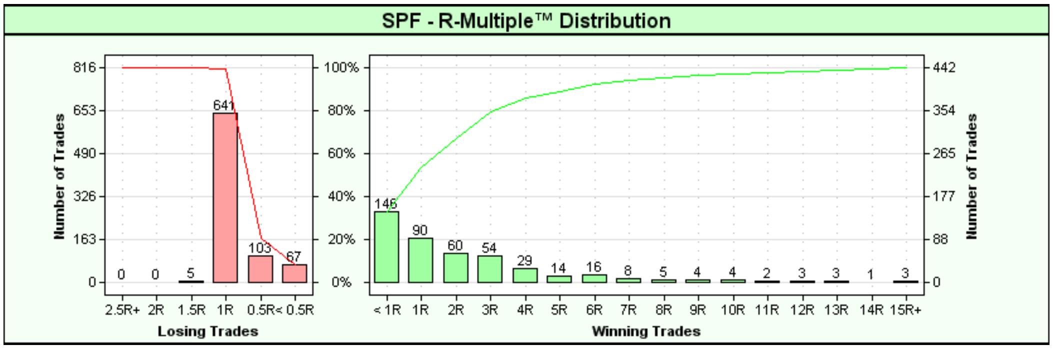


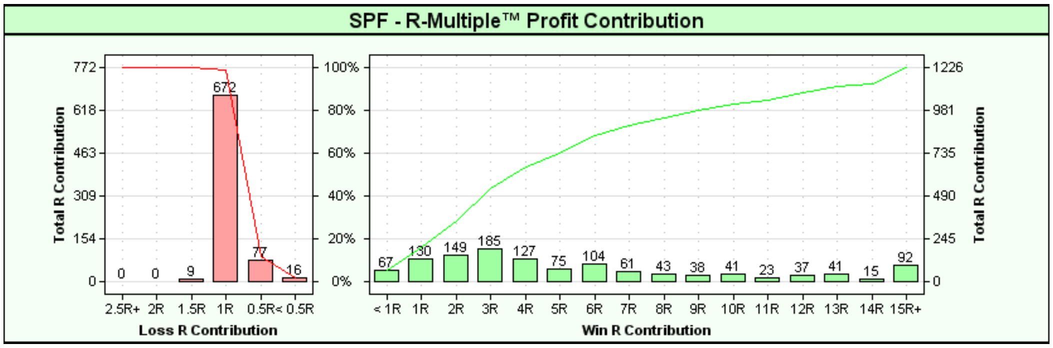
Monthly Returns



Monthly Return Distribution







Yearly Performance Summary

Year	Days	Closed Balance	End Total Equity	Total Equity Gain	Gain %	# Trades
1996	366	10,004,262.68	10,808,228.98	808,228.98	8.1%	70
1997	365	13,182,784.81	15,517,251.03	4,709,022.06	43.6%	78
1998	365	14,489,988.83	16,042,663.53	525,412.49	3.4%	88
1999	365	16,814,544.11	17,872,923.31	1,830,259.78	11.4%	69
2000	366	20,159,236.38	26,759,283.88	8,886,360.57	49.7%	86
2001	365	43,236,054.51	48,812,960.51	22,053,676.63	82.4%	75
2002	365	64,138,857.84	70,658,461.59	21,845,501.07	44.8%	61
2003	365	66,696,624.50	76,997,600.23	6,339,138.64	9.0%	94
2004	366	91,901,627.67	98,608,931.42	21,611,331.19	28.1%	78
2005	365	85,226,459.84	97,691,666.99	-917,264.43	-0.9%	76
2006	365	95,253,802.91	101,951,180.61	4,259,513.63	4.4%	72
2007	365	118,027,510.57	128,005,234.97	26,054,054.36	25.6%	76
2008	366	243,112,498.07	261,425,727.62	133,420,492.64	104.2%	66
2009	365	244,812,239.27	246,327,093.37	-15,098,634.25	-5.8%	66
2010	365	243,885,180.73	287,297,229.93	40,970,136.57	16.6%	81
2011	365	311,915,804.21	328,763,489.21	41,466,259.28	14.4%	74
2012	200	355,087,249.94	355,087,249.94	26,323,760.72	8.0%	48

Instrument Performance Summary

Symbol	Wins	%	Losses	%	Trades	Win Months	%	Loss Months	%	Avg. Win %	Avg. Loss %	Avg. Trade %	% Proft Factor
AD	15	42.9%	20	57.1%	35	147	73.9%	52	26.1%	3.10%	0.93%	0.80%	2.50
BP	11	21.6%	40	78.4%	51	137	68.8%	62	31.2%	2.01%	1.03%	-0.38%	0.53
C	20	42.6%	27	57.4%	47	141	70.9%	58	29.1%	1.88%	1.00%	0.23%	1.40
CC	10	20.0%	40	80.0%	50	134	67.3%	65	32.7%	3.56%	1.00%	-0.09%	0.89
CD	14	35.9%	25	64.1%	39	141	70.9%	58	29.1%	2.64%	1.01%	0.30%	1.46
CL	14	33.3%	28	66.7%	42	142	71.4%	57	28.6%	3.11%	0.98%	0.38%	1.59
CT	13	32.5%	27	67.5%	40	141	70.9%	58	29.1%	4.77%	0.94%	0.92%	2.45
EC	15	35.7%	27	64.3%	42	135	67.8%	64	32.2%	2.99%	0.89%	0.49%	1.86
ED	19	39.6%	29	60.4%	48	138	69.3%	61	30.7%	5.22%	0.94%	1.50%	3.65
EM	24	36.4%	42	63.6%	66	130	65.3%	69	34.7%	0.80%	0.44%	0.01%	1.03
FC	13	26.0%	37	74.0%	50	135	67.8%	64	32.2%	2.36%	0.95%	-0.09%	0.88
GC	19	40.4%	28	59.6%	47	145	72.9%	54	27.1%	2.60%	1.02%	0.45%	1.74
HG	16	34.0%	31	66.0%	47	137	68.8%	62	31.2%	3.41%	1.02%	0.49%	1.72
HO	16	39.0%	25	61.0%	41	145	72.9%	54	27.1%	3.47%	0.96%	0.77%	2.31
HU	17	37.0%	29	63.0%	46	133	66.8%	66	33.2%	2.22%	0.94%	0.23%	1.38
JY	16	34.8%	30	65.2%	46	139	69.8%	60	30.2%	2.27%	0.95%	0.17%	1.28
KC	14	28.6%	35	71.4%	49	138	69.3%	61	30.7%	2.79%	0.99%	0.09%	1.13
LC	11	21.6%	40	78.4%	51	125	62.8%	74	37.2%	2.70%	1.02%	-0.21%	0.73

LH	15	36.6%	26	63.4%	41	142	71.4%	57	28.6%	3.03%	0.95%	0.51%	1.84
MP	16	38.1%	26	61.9%	42	146	73.4%	53	26.6%	2.80%	1.09%	0.39%	1.58
NG	24	57.1%	18	42.9%	42	138	69.3%	61	30.7%	2.08%	1.00%	0.76%	2.79
S	17	37.8%	28	62.2%	45	145	72.9%	54	27.1%	2.28%	0.95%	0.27%	1.46
SB	11	23.4%	36	76.6%	47	135	67.8%	64	32.2%	2.94%	0.88%	0.01%	1.02
SF	19	44.2%	24	55.8%	43	145	72.9%	54	27.1%	2.05%	0.96%	0.37%	1.70
SI	13	27.1%	35	72.9%	48	139	69.8%	60	30.2%	3.04%	0.88%	0.18%	1.28
TY	19	51.4%	18	48.6%	37	153	76.9%	46	23.1%	2.60%	0.96%	0.87%	2.87
US	17	50.0%	17	50.0%	34	151	75.9%	48	24.1%	2.49%	0.87%	0.81%	2.86
W	14	33.3%	28	66.7%	42	139	69.8%	60	30.2%	2.33%	0.90%	0.18%	1.30

Test Period for parameter run 1.

First Test Date	1996-01-01
Last Test Date	2012-07-18

Trading Performance

CAGR %	24.08%
MAR Ratio	0.69
RAR %	25.77%
R-Cubed	1.00
Robust Sharpe Ratio	0.86
Margin to Equity Ratio	38.00%
Daily Return %	0.1003%
Daily Geometric Return %	0.0591%
Daily Standard Deviation %	1.87%
Daily Downside Deviation %	1.35%
Daily Sharpe	0.049
Daily Geo Sharpe	0.027
Daily Sortino	0.068
Modified Sharpe Ratio	0.87
Annual Sharpe Ratio	0.70
Annual Sortino Ratio	+ ∞
Monthly Sharpe Ratio	0.22
Monthly Sortino Ratio	0.43
Calmar Ratio	0.87
R-Squared	0.966
Maximum Total Equity Drawdown %	34.87%
Longest Total Equity Drawdown (months)	19.75
Average Max TE Drawdown %	31.47%
Average Max TE Drawdown Length (months)	13.71
Maximum Monthly Total Equity Drawdown %	27.73%
Maximum Monthly Closed Equity Drawdown %	22.97%
Maximum Closed Equity Drawdown %	36.43%
Average Closed Equity Drawdown %	8.49%
Round Turns Per Million	1,380
Round Turns	1,749,717
Total Trades	1,258
Start Account Balance	10,000,000.00
Total Win Dollars	1,133,374,474.55
Total Loss Dollars	788,287,224.61
Total Profit	345,087,249.94
Earned Interest	0.00
Margin Interest	0.00
End Account Balance	355,087,249.94
End Open Equity	0.00
End Total Equity	355,087,249.94
Highest Total Equity	383,173,010.26
Highest Closed Equity	355,087,249.94
Total Commissions	12,248,019.00
Commission per Round Turn	7.00
Total Slippage	67,320,549.96
Slippage per Round Turn	38.48
Total Forex Carry	0.00
Total Dividends	0.00
Total Other Expenses	0.00

Monte Carlo Confidence Level Statistics

90% Return	14.49%
90% Sharpe	0.02

Win/Loss Statistics

Wins	442	35.1%
Losses	816	64.9%
Total	1258	100.0%
Winning Months	117	58.8%
Losing Months	82	41.2%
Total	199	100.0%

Average Risk Percent	0.99%
Average Win Percent	2.70%
Average Loss Percent	0.94%
Average Win Dollars	2,564,195.64
Average Loss Dollars	966,038.27
Average Trade Percent	0.34%
Average Trade Duration	54.45
Average Trade Dollars	274,314.19
Profit Factor	1.44
Percent Profit Factor	1.56
Expectation	0.34

Equity Management

Test Starting Equity	10,000,000.00
Order Generation Equity	0.00
Order Generation Equity High	0.00
Leverage (fraction)	1.00
Trading Equity Base	Total Equity
Drawdown Reduction Threshold (%)	0.00%
Drawdown Reduction Amount (%)	0.00%

Global Simulation Parameters

Earn Interest	FALSE
Earn Dividends	TRUE
Pay Margin on Stocks	TRUE
Commission per Stock Trade	0.00
Commission per Stock Share	0.01
Commission per Contract	7.00
Commission by Stock Value (%)	0.00%
Slippage Percent	7.00%
Minimum Slippage	0.00
Forex Trade Size	1,000.00
Account for Forex Carry	TRUE
Use Pip Based Slippage	FALSE
Account for Contract Rolls	TRUE
Roll Slippage in % of ATR	3.50%
Minimum Stock Volume	1,000
Minimum Futures Volume	1,000
Max Percent Volume Per Trade	25.00%
Entry Day Retracement	0.00%
Max Margin Equity	100.00%
Trade on Lock Days	FALSE
Convert Profit by Stock Split	TRUE
Trade Always on Tick	TRUE
Smart Fill Exit	TRUE
Use Start Date Stepping	FALSE

90% MAR	0.31
90% R Squared	0.842
90% Maximum Drawdown	50.76%
90% Second Largest Drawdown	40.45%
90% Third Largest Drawdown	35.93%
90% Longest Drawdown	57.8
90% Second Longest Drawdown	31.0
90% Third Longest Drawdown	21.9

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

System Parameter Settings

SPF Parameters

Allocation Percent	100.00%
Risk Per Trade (%)	1.00%
LMA_PERIOD	300
SMA_PERIOD	50
ENTRY_PERIOD	75
ATR_PERIOD	20
ATR_SL_TIMES	2.00
ATR_EX_TIMES	5.00
Portfolio	Futures:All Liquid