



GRAHAM CAPITAL MANAGEMENT
GLOBAL ALTERNATIVE INVESTMENT STRATEGIES

SYSTEMATIC GLOBAL MACRO (“CTAs”): PERFORMANCE, RISK, AND CORRELATION CHARACTERISTICS

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PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.

Systematic Global Macro: Benefits

- ▶ Positive annual returns for more than 20 years
- ▶ Low to negative correlations to most other asset classes and hedge fund strategies
- ▶ Managed accounts lead to increased transparency
- ▶ Strong historical performance during crisis periods

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GLOBAL ALTERNATIVE INVESTMENT STRATEGIES

Low Correlation to Other Asset Classes

January 1994 – December 2008

VS. TRADITIONAL ASSET CLASSES

	Barclay Systematic Traders Index	S&P 500	MSCI EAFE Index	Lehman Brothers T-Bond Index
Barclay Systematic Traders Index ("BSTI")	1.00			
S&P 500	-0.15	1.00		
MSCI EAFE Index	-0.10	0.79	1.00	
Lehman Brothers T-Bond Index	0.28	-0.09	-0.12	1.00

VS. ALTERNATIVE ASSET CLASSES

	Barclay Systematic Traders Index	CSFB/ Tremont Global Macro	CSFB/ Tremont Equity Market	CSFB/ Tremont Fixed Income	CSFB/ Tremont Event Driven	CSFB/ Tremont Long/Short Equity	CSFB/ Tremont Convertible Arbitrage	CSFB/ Tremont Dedicated Short Bias	CSFB/ Tremont Emerging Markets
Barclay Systematic Traders Index ("BSTI")	1.00								
CSFB/Tremont Global Macro	0.37	1.00							
CSFB/ Tremont Equity Market Neutral	0.01	0.07	1.00						
CSFB/ Tremont Fixed Income Arbitrage	-0.03	0.42	0.33	1.00					
CSFB/ Tremont Event Driven	-0.08	0.42	0.28	0.54	1.00				
CSFB/ Tremont Long/Short Equity	0.05	0.47	0.17	0.37	0.72	1.00			
CSFB/ Tremont Convertible Arbitrage	-0.05	0.37	0.21	0.78	0.67	0.44	1.00		
CSFB/ Tremont Dedicated Short Bias	0.09	-0.12	-0.12	-0.17	-0.57	-0.68	-0.23	1.00	
CSFB/ Tremont Emerging Markets	-0.06	0.46	0.12	0.39	0.70	0.64	0.42	-0.53	1.00

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Conditional Correlations

January 1994 – December 2008

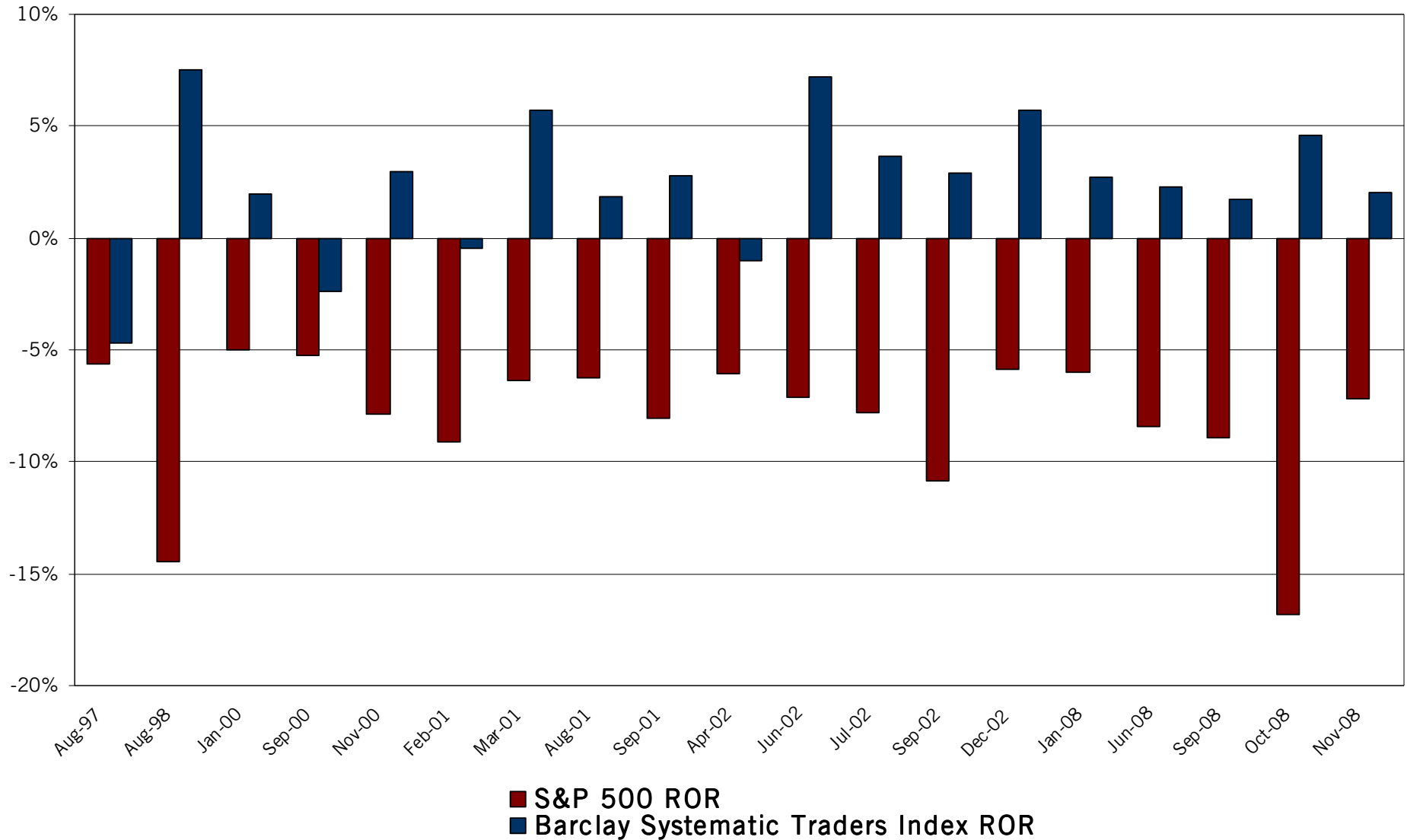
Correlation with S&P 500 Index	Up Months	Down Months	All Months
BARCLAY SYSTEMATIC TRADERS INDEX	-0.02	-0.31	-0.15
CSFB/Tremont Global Macro	0.17	0.38	0.26
CSFB/Tremont Equity Market Neutral	0.51	0.22	0.24
CSFB/Tremont Fixed Income Arbitrage	0.12	0.44	0.33
CSFB/Tremont Event Driven	0.49	0.68	0.61
CSFB/Tremont Convertible Arbitrage	0.28	0.41	0.37
CSFB/Tremont Long/Short Equity	0.54	0.71	0.63
CSFB/Tremont Dedicated Short Bias	-0.73	-0.74	-0.73
CSFB/Tremont Emerging Markets Index	0.35	0.70	0.52

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Performance During Stress Periods for S&P 500

JANUARY 1994 – DECEMBER 2008

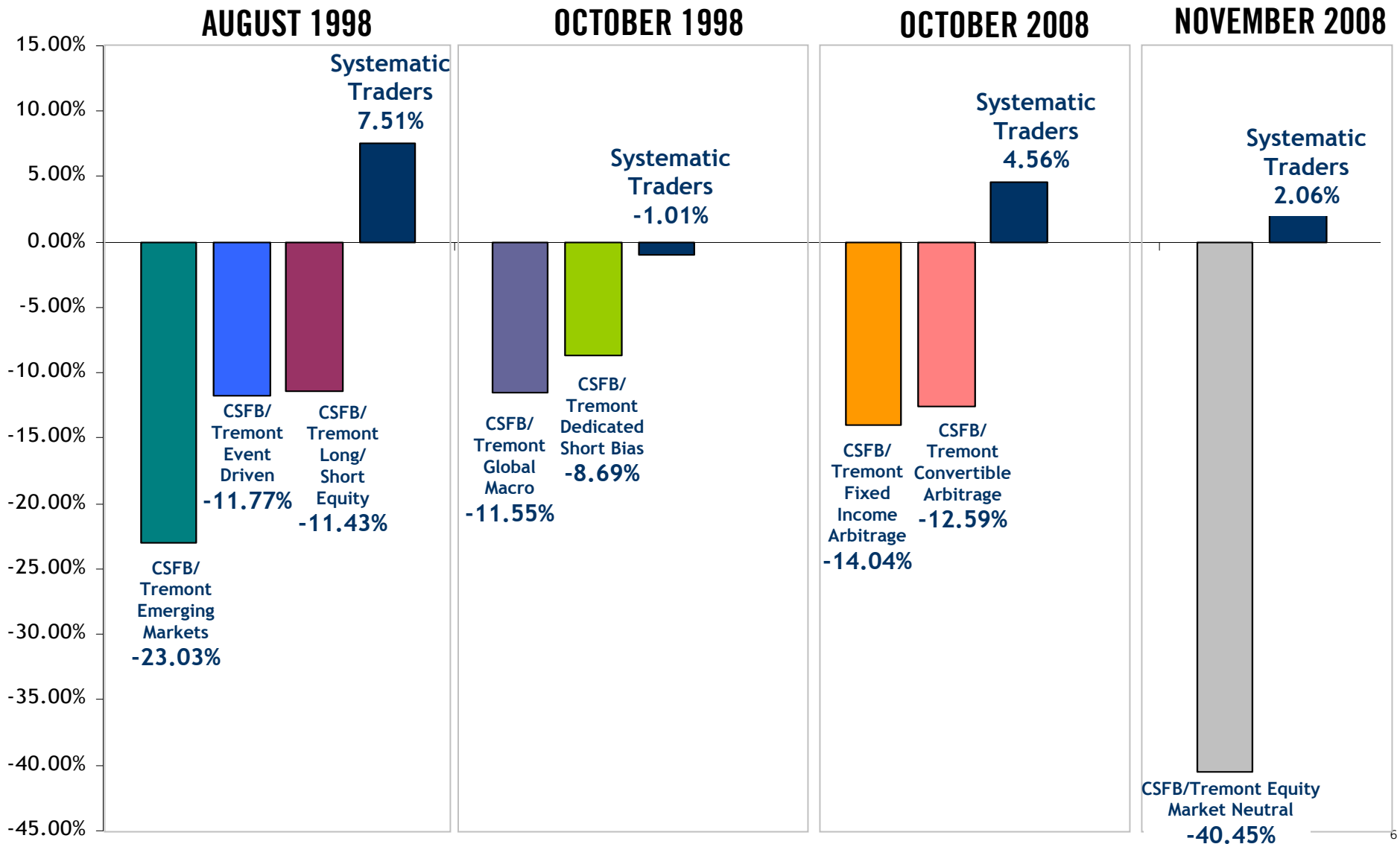


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Performance during Stress Periods for Hedge Fund Strategies

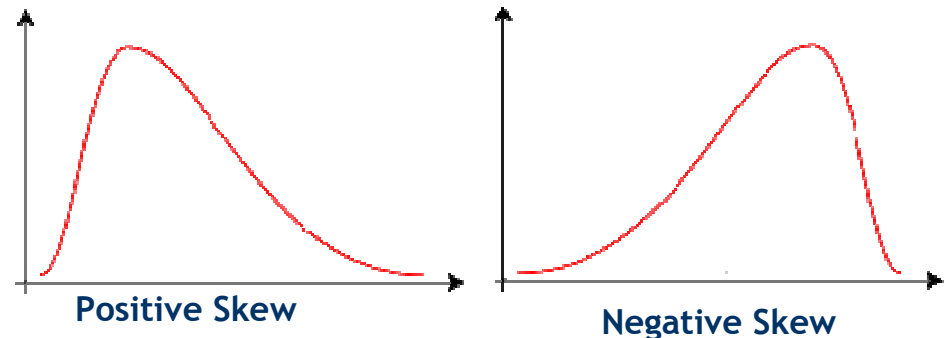
January 1994 – December 2008



Skew & Kurtosis

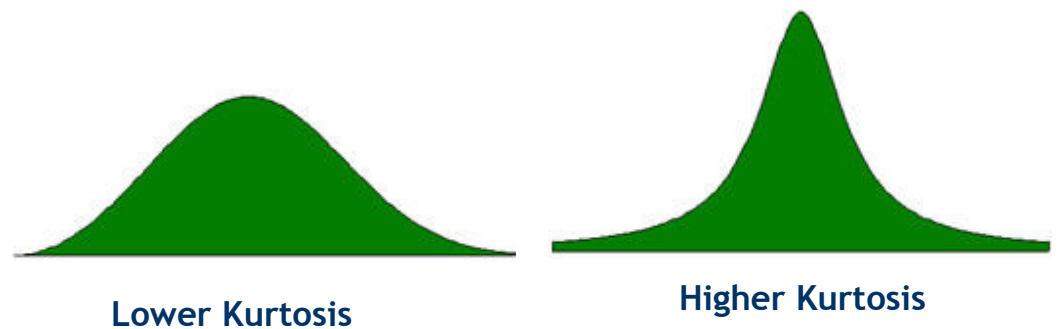
Skew:

Skew is a measure of a distribution's symmetry. Skew of zero indicates the distribution is symmetric; negative skew distributions have thicker left tails than right, with positive skew distributions having thinner left tails than right tails.



Kurtosis:

Kurtosis is a measurement of the thickness of a distribution's tails. Excess kurtosis of zero indicates the distribution has the realization of tail events occurring at about the same frequency as a normal distribution.



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Skew & Kurtosis of Hedge Fund Strategies

January 1994 – December 2008

Standard Deviation from Mean (z-score)	Standard Deviation from Mean (z-score)										Skew	Excess Kurtosis
	-14 to -12	-12 to -10	-10 to -8	-8 to -6	-6 to -4	-4 to -2	-2 to 0	0 to 2	2 to 4	4 to 6		
BSTI						3	89	80	8		0.22	0.18
Dedicated Short Bias							97	78	4	1	0.78	1.73
Global Macro				1	7	77	88	7			-0.03	3.04
Long/Short Equity				1	3	87	85	3	1		0.02	3.53
Emerging Markets				1	4	71	101	3			-0.74	4.64
Event Driven			1		6	71	102				-2.70	14.79
Convertible Arbitrage			2		3	60	115				-3.56	19.58
Fixed Income Arbitrage			1	2	3	55	119				-4.63	29.96
Equity Market Neutral	1					72	107				-12.02	155.46

Autocorrelation

- ▶ Autocorrelation measures the tendency of an above average return to be followed by another above average return.
- ▶ Positive autocorrelation of monthly returns leads to an increased volatility of annual returns.
- ▶ Negative autocorrelation of monthly returns leads to a decreased volatility of annual returns.
- ▶ Incorporating statistically significant autocorrelations of monthly returns is important to accurately measure annual volatility.

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One Month Lag Autocorrelation

January 1994 – December 2008

One Month Lag Autocorrelation:

The correlation between one month's return and the previous month's return.

	One Month Lag
BARCLAY SYSTEMATIC TRADERS INDEX	-0.01
CSFB/Tremont Global Macro	0.10
CSFB/Tremont Equity Market Neutral	0.08
CSFB/Tremont Fixed Income Arbitrage	0.51
CSFB/Tremont Event Driven	0.39
CSFB/Tremont Convertible Arbitrage	0.57
CSFB/Tremont Long/Short Equity	0.22
CSFB/Tremont Dedicated Short Bias	0.09
CSFB/Tremont Emerging Markets Index	0.32

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Autocorrelation & Volatility

January 1994 – December 2008

	Information Ratio disregarding Autocorrelation	Information Ratio incorporating Autocorrelation	Information Ratio Difference
BARCLAY SYSTEMATIC TRADERS INDEX	0.72	0.93	0.21
CSFB/Tremont Global Macro	1.18	0.98	-0.20
CSFB/Tremont Equity Market Neutral	0.51	0.43	-0.08
CSFB/Tremont Fixed Income Arbitrage	0.58	0.35	-0.23
CSFB/Tremont Event Driven	1.57	1.02	-0.56
CSFB/Tremont Convertible Arbitrage	0.80	0.43	-0.37
CSFB/Tremont Long/Short Equity	0.95	0.74	-0.21
CSFB/Tremont Dedicated Short Bias	-0.05	-0.05	-0.01
CSFB/Tremont Emerging Markets Index	0.42	0.33	-0.10

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Sample Portfolio Construction

January 1994 – December 2008

The weightings for each portfolio listed below have been optimized for different risk/return ratios.

	PORTFOLIO A: <i>Maximum Information Ratio (disregarding Autocorrelation)</i>	PORTFOLIO B: <i>Maximum Information Ratio (incorporating Autocorrelation)</i>	PORTFOLIO C: <i>Maximum Calmar Ratio Portfolio Weight</i>	PORTFOLIO D: <i>Sortino Ratio Portfolio Weight</i>
BARCLAY SYSTEMATIC TRADERS INDEX	14%	20%	20%	20%
CSFB/Tremont Global Macro	4%	4%	20%	6%
CSFB/Tremont Equity Market Neutral	4%	4%	4%	4%
CSFB/Tremont Multi-Strategy	20%	4%	4%	14%
CSFB/Tremont Fixed Income Arbitrage	4%	4%	4%	4%
CSFB/Tremont Event Driven	20%	18%	16%	20%
CSFB/Tremont Convertible Arbitrage	4%	4%	4%	4%
CSFB/Tremont Long/Short Equity	13%	18%	4%	13%
CSFB/Tremont Dedicated Short Bias	13%	20%	20%	11%
CSFB/Tremont Emerging Markets Index	4%	4%	4%	4%

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Comparison of Optimal Portfolios

January 1994 – December 2008

	PORTFOLIO A: <i>Maximum Information Ratio (disregarding Autocorrelation)</i>	PORTFOLIO B: <i>Maximum Information Ratio (incorporating Autocorrelation)</i>	PORTFOLIO C: <i>Maximum Calmar Ratio Portfolio Weight</i>	PORTFOLIO D: <i>Maximum Sortino Ratio Portfolio Weight</i>
Information Ratio (disregarding Autocorrelation)	1.82	1.68	1.48	1.78
Information Ratio (including Autocorrelation)	1.13	1.29	1.19	1.21
Calmar Ratio	0.48	0.59	0.69	0.54
Sortino Ratio	2.30	2.20	2.00	2.35