

YU ENDOWMENT – OFFICE OF INVESTMENT MANAGEMENT

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CADC 2011

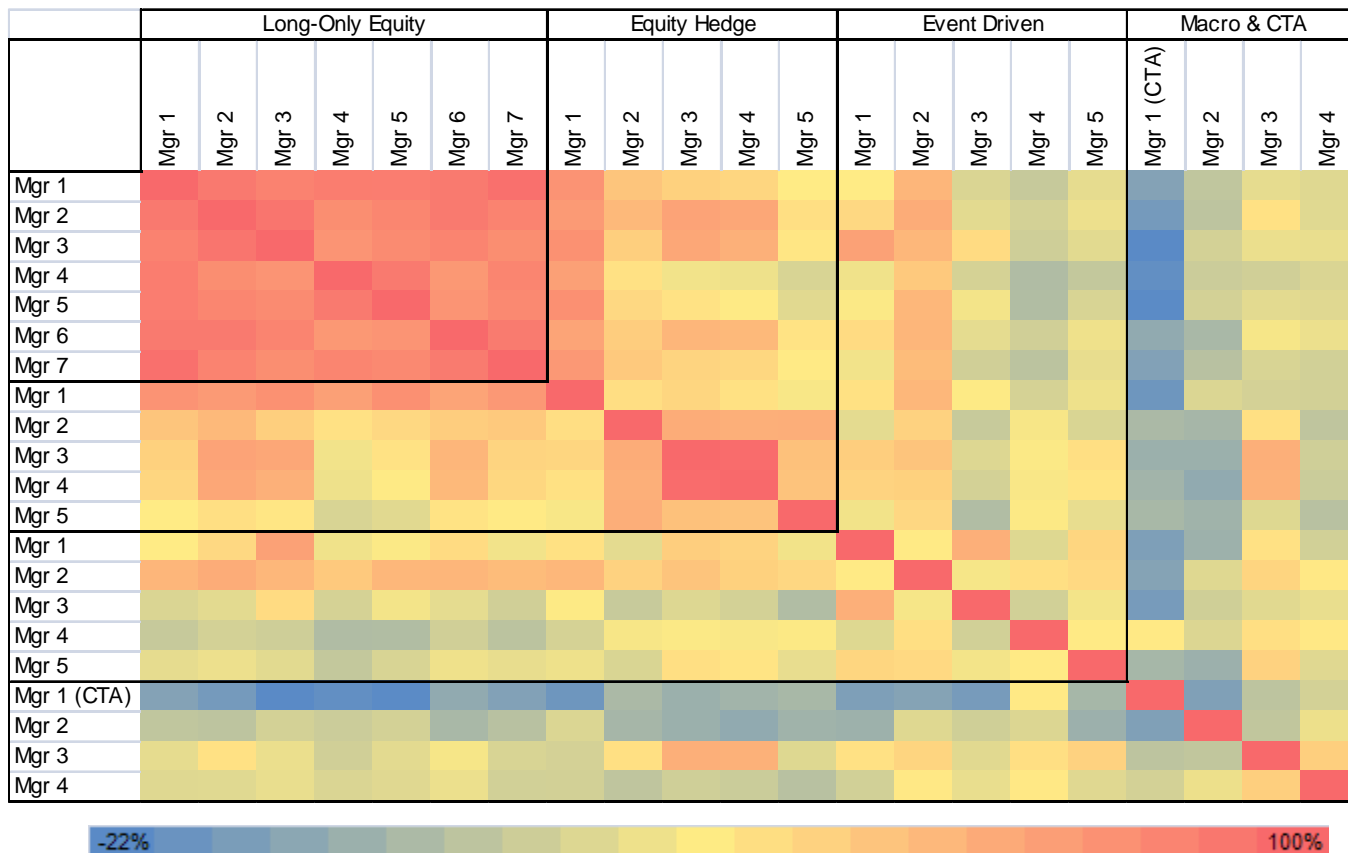
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I. “Managed Futures are True Diversifiers”

Correlation Structure of Long-Only Equity And Core Hedge Fund Managers (Last 5 Years)



Word of Caution:

A common mistake people make is to expect CTA's to work as pointwise hedge against market moves. The problem with this is that at those points most CTA's are on the wrong side, resulting in higher correlations for short horizons. However, since CTA's can adjust their position, we need a longer horizon (e.g. month) to measure true correlation.



II. PERFORMANCE AND RISK REVIEW

Return Analysis				Comments
	CTA Manager	Barclay CTA vol-adjusted	Barclay CTA	<ul style="list-style-type: none"> Negative beta in down-markets makes it a suitable hedge in the portfolio While the Fund displays larger losses than the benchmark, the magnitude of the gains on the upside more than compensate for these losses (see quintile graph)
Start Date	11/30/2006	11/30/2006	11/30/2006	
End Date	10/31/2011	10/31/2011	10/31/2011	
Months	60	60	60	
Annualized Average Return	17.3%	13.7%	5.7%	
Annualized Volatility	14.7%	14.7%	6.0%	
Annualized Sharpe Ratio ⁽¹⁾	1.2	0.9	0.7	
Max Drawdown	11.9%	10.6%	4.4%	
Current State of Drawdown	11.9%	10.2%	4.2%	
Autocorrelation	4.3%	-9.2%	-9.2%	
Returns Analysis				
Hit Ratio	63%	57%	57%	
Average Return	1.4%	1.2%	0.5%	
Average Gain	4.0%	4.1%	1.7%	
Average Loss	-3.0%	-2.7%	-1.1%	
Volatility	4.2%	4.2%	1.7%	
Gain Volatility	2.7%	3.0%	1.2%	
Loss Volatility	2.3%	1.9%	0.8%	
Large Moves Analysis⁽²⁾				
Hit Ratio	70%	79%	79%	
Average Return	2.8%	4.0%	1.6%	
Average Gain	6.4%	6.6%	2.7%	
Average Loss	-5.6%	-5.7%	-2.3%	
Volatility	5.9%	5.7%	2.3%	
Gain Volatility	1.8%	2.6%	1.0%	
Loss Volatility	1.6%	1.4%	0.6%	
SP 500 Comparison				
Alpha	1.4%	1.2%	0.5%	
Beta	NS	NS	NS	
Rsquared	1%	0%	0%	
Beta Up	NS	NS	NS	
Beta Down	-0.5	-0.4	-0.2	

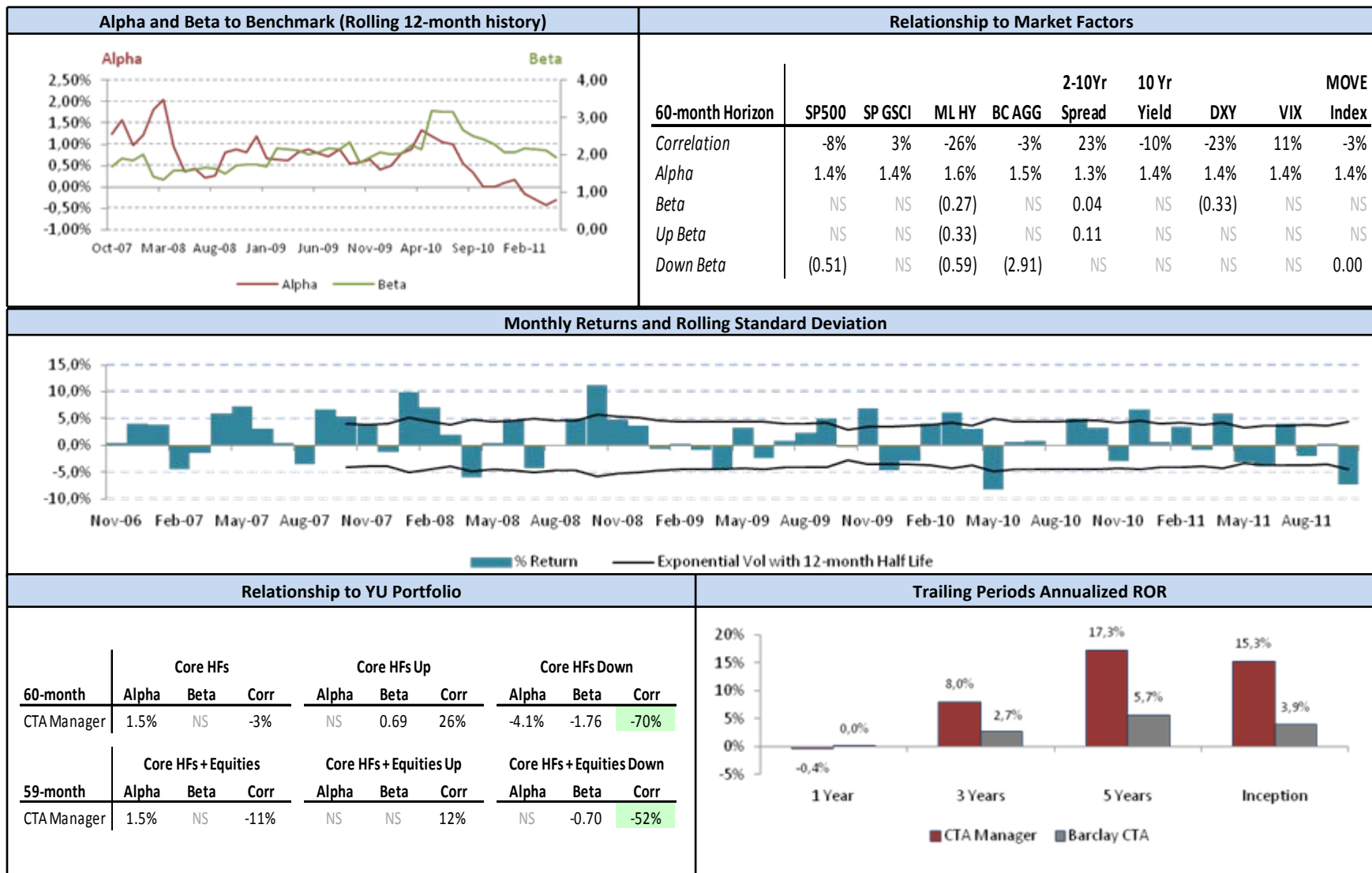
Cumulative Wealth Ratio and Historical Percent Drawdown	

Average Fund Returns Bucketed by Benchmark Quintiles	
<p>Alpha=0.5% Beta=1.92 Rsq=61%</p>	

Note: (1) Risk-free rate is 3-month LIBOR, (2) Monthly returns greater than 1 std in magnitude.

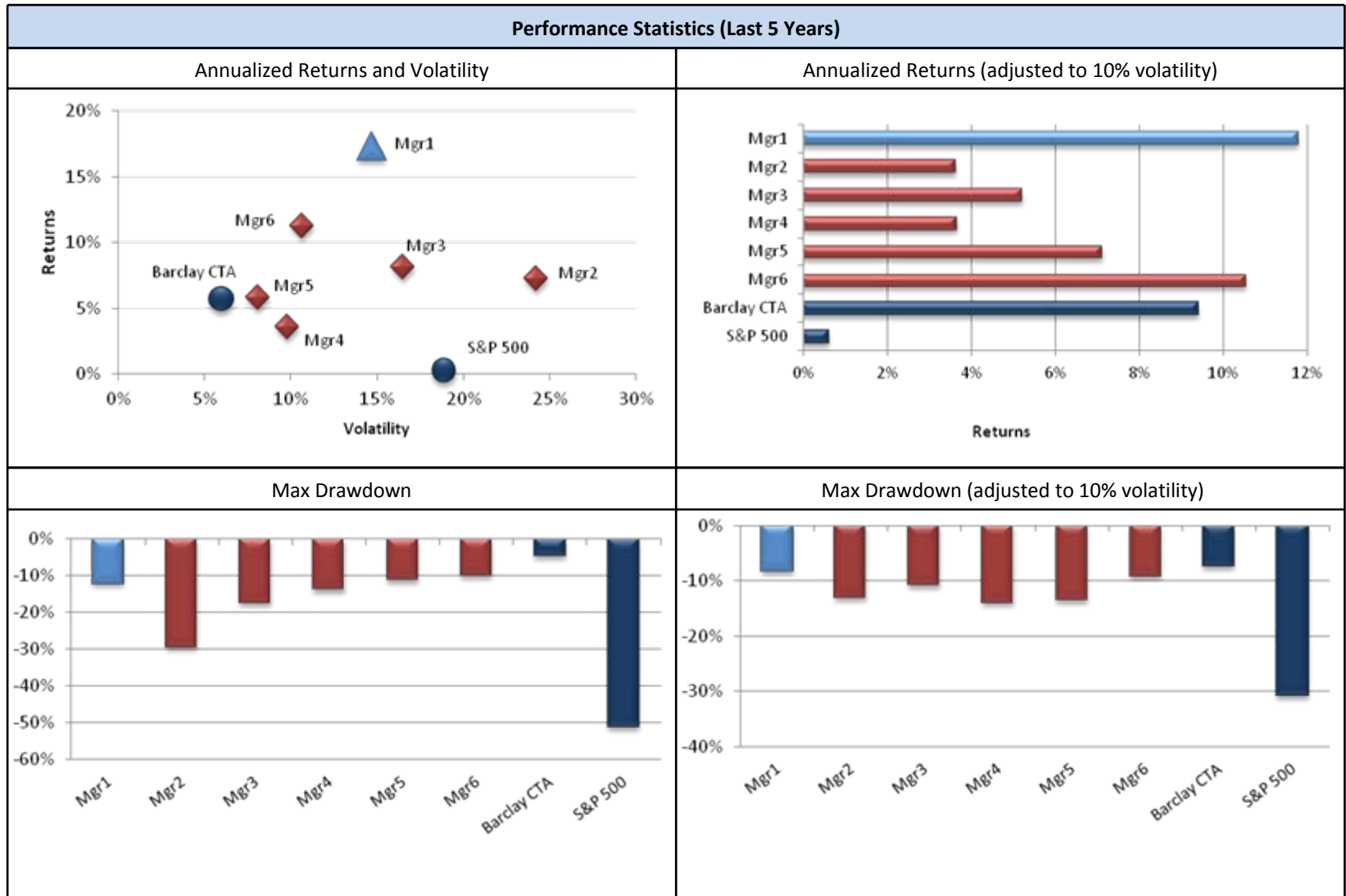


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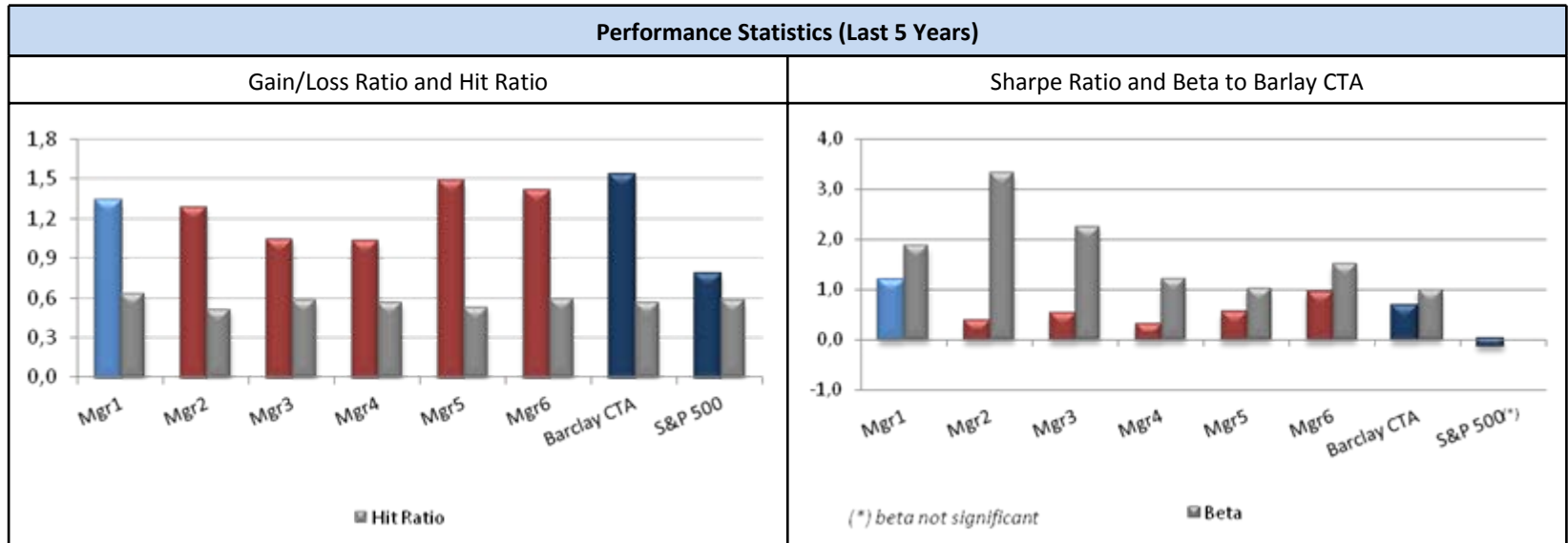


III. PEER GROUP ANALYSIS





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IV. ACKNOWLEDGEMENTS

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