RED ROCK

April 2018

AN HONEST UPDATE ON THE TREND FOLLOWING LANDSCAPE

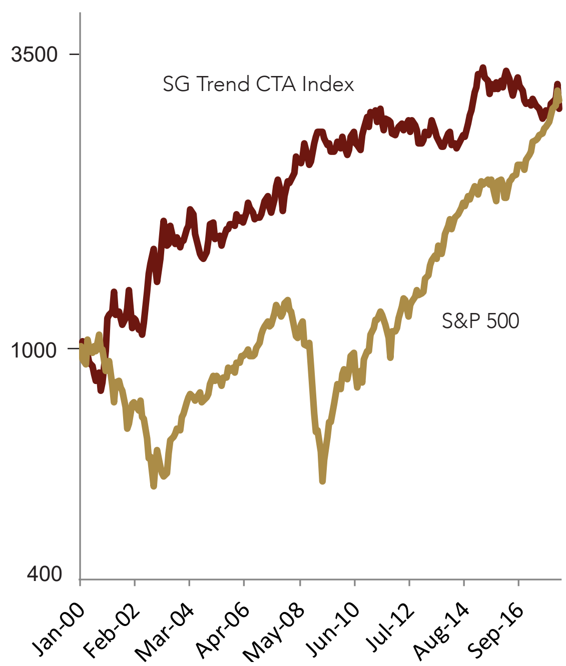
Background

Trend following is the most prevalent strategy utilized throughout the managed futures industry. In September 2013, during the toughest recession our industry had ever experienced, we published the original version of this paper. Our aim was to offer a transparent and intellectually honest update on the track records of many of the most well-known trend followers. At that time, all twenty managers included in our analysis, including our Systematic Global Macro (systematic trend following) program, along with all of the major CTA indexes, were in a drawdown off their all-time high water marks.

Now, in early 2018, the question remains the same as we posed in the original version of our paper: what is the best way to objectively analyze, measure, and compare the performance of a group of trend following CTAs? To help answer this question we developed our own metric that measures and compares the "goodness" of returns for similar-style managers. This paper updates our original work (and subsequent versions that we published during 2014 – 2017) and the measurements and ranking methodology that we initially introduced remain the same.

A Diversification Reminder

Before delving into the results of the analysis, it seems appropriate to remind readers of the diversification benefits that CTA trend followers have produced historically. The below chart shows the hypothetical path of $1,000 invested in both the S&P 500 (Total Returns) and the Soc Gen Trend CTA Index since January 2000. During this period stocks twice fell 50%. Perhaps most impressive has been the eye-poppingly low correlation between CTA trend followers and U.S. stocks during the period: -0.12.



Past performance is not necessarily indicative of future performance. Indexes have inherent limitations: they are uninvestable, do not incur management fees, transaction costs, or other expenses associated with an investment product. Source: Red Rock Capital and BarclayHedge.

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Since their low in March 2009 stocks have produced +380%. This secular bull market was fueled by an unprecedented amount of Central Bank coordination and intervention – whose actions produced both artificially low interest rates and artificially low volatility in markets. In fact, during the years of Quantitative Easing, the Fed acquired a total of $3.4 trillion in treasury-securities and mortgage-backed securities. However, February 2018 marked the fifth month of the Fed's QE-Unwind, so perhaps asset classes that have artificially benefited from all of the financial intervention... may face more realistic headwinds going forward.

Who was analyzed?

This updated version of our paper includes analysis on 18 of the 20 trend following managers that we initially studied (one closed down in 2014 and the other in 2017), plus the SG CTA Index, the SG Trend (CTA) Index, the SG Trend Indicator, and four additional managers that we added during 2014 – 2015. It is important to note that the SG CTA Index represents the equal-weighted performance of the top 20 largest diversified CTAs open for investment, the SG Trend CTA Index represents the equal-weighted performance of the top 10 largest trend following CTAs open for investment, and the SG Trend Indicator is a fully-disclosed, rule-based trend following strategy that offers an interesting and transparent look into the daily performance and positions of a professionally developed, albeit basic, trend model.

Common Misunderstandings

Each year it seems a manager or two in our list receives accolades for their 'impressive', outsized performance. For instance, during 2014 one manager made +67.38% and another produced +61.95%. However, the problem is reporting only these types of "return" numbers tells, at best, only half of the story (this is a fact; not just our opinion). When you hear a manager's performance being quoted, the first question someone should ask is, "At what level of risk / margin-to-equity / volatility?" A Commodity Trading Advisor makes a *subjective choice* as to what level margin-to-equity to operate his or her program – but the level chosen is *not*, in and of itself, a source of "goodness." Furthermore, an investor who opens a managed account with a CTA, through the use of notional funding, can modify the manager's regular program volatility to suit their own appetite for risk. Therefore, due to the inherent leverage (i.e. free; no cost to lever up – unlike stocks) found in the futures markets, *risk-adjusted* returns (not absolute returns) are the only accurate and proper way to compare similar managers' returns.

A program run with a higher margin-to-equity ratio will produce a higher compound rate of growth at the price of higher drawdowns (periods of loss). For example, assume one manager produces a +60% net return over 12 months and another manager only produces a +20% net return. If the second manager used only 1/3 as much margin-to-equity, and produced only 1/3 as much volatility in his returns, then the two managers' performance were essentially equal on a risk-adjusted basis. However, the first manager will often win awards and be touted for having "better" performance – which demonstrates a lack of understanding of, or at least a lack of concern for, a crucial aspect about managed futures and how to correctly measure performance.

This point appears to be repeatedly misunderstood by most members of the financial press. An example is Barron's 'Top 100 Hedge Funds for 2016' which included at least three CTAs that we analyzed in this paper. But for the entire list they only report 'returns' data, with no accompanying 'risk' data (annualized volatility, maximum drawdown; something would be better than nothing).

To bring this point full-circle, while the net returns of the two earlier mentioned managers of +67.38% and +61.95% during 2014 indeed sounded impressive on the surface, a study of their track records showed that the former had lost over 35% in one recent calendar year (and lists a 45.04% maximum historical drawdown) and the latter lost money in three consecutive recent calendar years and lists a 34.79% maximum drawdown. Both managers went on to produce all-time net-new equity highs in 2016, for which they should be commended, however, in order to get an intellectually honest and accurate reading of their true relative performance, one must include data on both returns and risk in one's analysis.

Ranking Methodology

Our proprietary metric aims to step into the shoes of a loyal, long-term investor with any of the managers that we analyze, and asks, “What aspects of my CTA manager’s performance are most important to me?” The following table conveys the most important aspects, the proxies we use to measure them, and the weight we give to each individual measurement in our weighted final ranking:

Important Aspect of Manager’s Returns	Proxy for Measurement	Weighting
When was the last net new equity high made?	Months in Current Drawdown	25%
What is the current drawdown from the last high-water mark?	Depth of Current Drawdown	25%
How good have the manager’s risk-adjusted returns been over the long run?	Sortino Ratio	50%
		100%

For the period since the inception of our Systematic Global Macro program (September 2003) through February 2018, we measure each aspect of the managers’ returns via our proxies and then assign them a weight.

Once we have the rankings for each of the managers on the individual aspects, we combine the rankings at their above respective weights to arrive at a final rank (similar to how one calculates a grade point average). This is a straightforward, quick method to compare similar futures managers to one another. By design, and to reduce the complexity of the process, the rankings do not have proportional information embedded in them, i.e. *how much better* is Manager A than Manager B, etc. When considering the results of our ranking presented in the table on the next page, the following should be noted:

- Since a CTA’s returns, volatility, and drawdowns are functions of a subjective decision that has been made by the manager, only analyzing the managers’ length and depth of their current (if applicable) drawdown is not sufficient. A risk-adjusted metric (referred to as “Reward to Risk Ratio” in the forthcoming table) must be applied that normalizes managers’ returns against one another.

- As we convey in our white paper, *Sortino: A ‘Sharper’ Ratio*, the Sortino ratio is a more appropriate measure to use for this purpose than the more popular Sharpe ratio. This is because the Sharpe ratio, by assuming that the returns it is measuring are normally distributed, unfairly and incorrectly penalizes managers whose returns exhibit positive asymmetry (skewness). In reality, investors typically welcome upside volatility and perceive only downside volatility as actual risk. As R. McFall Lamm, Jr., then Chief Investment Strategist of Deutsche Bank Private Wealth Management aptly stated, *“... positive asymmetry should have value...[because] investors prefer upside to downside risk — and are generally willing to pay for it.”*

- While on the topic of positive asymmetry / skewness of returns, it is worth noting that for the period summarized by the chart on the first page, the Soc Gen Trend CTA Index produced ***positive*** skewness of 0.17. The S&P 500 produced ***negative*** skewness of -0.56 over the same period.

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Ranking Results

Sep 2003 - Feb 2018	Months in Current Drawdown	Depth of Current Drawdown	Reward to Risk Ratio	Ranking by Individual Sector: Months in Current Drawdown	Ranking by Individual Sector: Depth of Current Drawdown	Ranking by Individual Sector: Reward to Risk Ratio	FINAL RANK
WINTON	1	-5.60%	1.58	1	2	1	**1**
ECKHARDT	1	-3.01%	0.81	1	1	9	**2**
TRANSTREND	1	-8.51%	0.94	1	5	7	**2**
RED ROCK - SGM	20	-13.22%	1.38	8	10	3	**4**
WELTON	20	-7.19%	0.81	8	4	9	**5**
MULVANEY	24	-18.69%	0.95	10	15	5	**6**
CHESAPEAKE	1	-6.45%	0.62	1	3	16	**7**
SYSTEMATICA	24	-19.67%	0.95	10	17	5	**8**
ISAM	24	-28.26%	1.01	10	22	4	**9**
COVENANT	37	-21.17%	1.48	21	19	2	**10**
DRURY	1	-8.98%	0.61	1	7	18	**10**
SG CTA INDEX	24	-9.70%	0.67	10	8	14	**12**
ABRAHAM	35	-18.67%	0.81	15	14	9	**13**
ASPECT	24	-11.09%	0.65	10	9	15	**14**
MILLBURN	4	-8.56%	0.60	7	6	19	**15**
MAN AHL	35	-16.58%	0.77	15	13	12	**16**
LYNX	35	-29.52%	0.85	15	23	8	**17**
DUNN	1	-19.66%	0.56	1	16	20	**18**
SG TREND CTA INDEX	35	-14.64%	0.55	15	12	21	**19**
ESTLANDER	82	-26.16%	0.69	23	21	13	**20**
GRAHAM	35	-13.81%	0.51	15	12	22	**20**
ALTIS	86	-39.47%	0.62	24	25	16	**22**
CAMPBELL	35	-19.73%	0.31	15	18	25	**23**
SG TREND INDICATOR	77	-34.84%	0.42	22	24	23	**24**
SUNRISE	99	-24.05%	0.33	25	20	24	**25**

Past performance is not necessarily indicative of future performance. Indexes have inherent limitations: they are uninvestable, do not incur management fees, transaction costs, or other expenses associated with an investment product. Source: BarclayHedge, Red Rock Capital, Coquest, IASG, Soc Gen, manager websites. 'Reward to Risk Ratio' is Sortino Ratio (Target = 0%). Systematica is from April '04; Welton from June '04. Sunrise is Expanded Diversified through Dec '16 then Evolution. For informational purposes only. Red Rock Capital, LLC not responsible for subsequent modifications to, or accuracy of, performance data.

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Observations & comments about the results:

- Winton is ranked #1
- 6 out of 26 managers (23%) attained a new high-water mark 1 month ago (Jan 2018). Kudos to Winton, Eckhardt, Transtrend, Chesapeake, Drury, and Dunn.
- 2 out of 26 managers (7%) produced their most recent high-water mark 20 months ago (Jun 2016)
- 6 out of 26 managers (23%), including the SG CTA Index, made their most recent high-water mark 24 months ago (Feb 2016)
- 6 out of 26 managers (23%), including the SG Trend CTA Index, made their most recent high-water mark 35 months ago (Mar 2015)
- 3 out of 26 managers (11%) have not made a net new high in over 80 months

A well-respected Introducing Broker in the industry suggested to us that an additional, pertinent characteristic to consider is the minimum managed account (SMA) size requirement for the managers and programs analyzed in this paper. Some minimums are reported to be $50 million – while qualified investors can obtain their own investment account with some of the other managers, who are ranked highly on the list, for only $500k.

In this article we present an efficient, consistent, and straightforward method to objectively measure and compare the performance of similar trend following CTA managers.

What will the future hold for trend followers? We believe a new paradigm is unfolding: in late March the yield curve was the flattest it has been in 11 years... and it could be on its way to inverting. Several other factors like the QE-Unwind, rising interest rates, tariffs and potential 'trade wars' could lead to significant market dislocations and a more beneficial environment for trend followers in the coming months and years.

– Thomas N. Rollinger
CEO/Portfolio Manager

Important Disclosures

This document is for informational purposes only and it is not a solicitation for investment. Past results are not necessarily indicative of future results. An investment with any Commodity Trading Advisor should only be made after careful study of the advisor's Disclosure Document including the description of the objectives, principal risks, charges, and fees associated with such an investment. Red Rock Capital, LLC not responsible for subsequent modifications to, or accuracy of, performance data. Indexes such as the SG CTA and SG Trend CTA have inherent limitations and are uninvestable.

About Red Rock Capital

Red Rock Capital is a multi-award winning commodity investment management firm. During 2018 Red Rock's Systematic Global Macro Program will proudly celebrate its 15th anniversary. The firm is led by Thomas Rollinger, most notably a devoted pupil and former associate of quantitative hedge fund pioneer and legend, Edward O. Thorp. Given recent developments with the firm and the robustness of their approach, Red Rock is especially well-positioned to continue to grow and thrive in the managed futures industry.