ROW Asset Management – ROW Diversified Program

Rear from left to right: Seng Ung, Ryan O`Grady, Janessa Garcia, Debra Oaks, Tim O`Grady
Front: Jeffrey Weiser

At a Glance:

ROW Diversified Program

Program Assets:	$105 million
Firm Assets:	$135 million
No. of Employees	8

Account Information

Minimum Investment:	$1,000,000
Management Fee:	2.00%
Incentive Fee:	20%

Performance Analysis

Start Date:	November 2011
Total Return:	17.10%
Compound Ann. Return:	6.76%
Worst Drawdown:	7.37%
Sharpe Ratio:	1.02
% of Winning Months:	68.97%
Average Gain:	1.49%
% of Losing Months:	31.03%
Average Loss:	1.49%

Correlations

Barclay CTA Index	0.39
S&P 500:	0.01
U.S. T-Bonds:	0.07
World Bonds:	0.02
EAFE:	-0.22

Annual Returns Past 4 Years

2011 (partial year)	2.77%
2012	7.08%
2013	2.49%
2014 YTD	3.85%

Past results are not necessarily indicative of future performance.

ROW Asset Management is a quantitative global macro investment firm founded by Ryan O'Grady and Jeffrey Weiser in July 2010. ROW's investment philosophy was developed during the 14 years that O'Grady and Weiser worked together at FX Concepts; O'Grady as head of research, and Weiser as portfolio manager for the flagship Global Currency Program. The firm's most unique trait is that all 8 employees have spent virtually their entire professional careers working together, with the exception of Tim O'Grady – Ryan's father.

Key Principals

O'Grady and Weiser were part of an infusion of young talent at FX Concepts in the early-mid 1990's, several of whom are now key employees at ROW. Ironically, Weiser started in the research department and migrated to trading, while O'Grady started in the trading room and shifted into research. Their breadth of experience gives each the intuition to understand the other's point of view. Says O'Grady, "When I give talks to MBA or MFE students interested in quant careers, I tell them to find some way to get trading experience. So much of quant model building is mistake avoidance, and that skill can only be developed by making mistakes." The research process includes a continued back-and-forth dialogue between O'Grady, Weiser, and the research team – challenging the idea behind a new model, testing it at its weakest points, coming up with hypothetical scenarios in which it should do well, or do poorly, and confirming that the model behaves as it should.

Investment Philosophy

ROWAM's flagship program is the ROW Diversified Program – their expression of a true "all-weather" program. The Diversified Program trades approximately 60 different assets, spread over currencies, interest rates, equity indices, ag/soft, and energy markets. The strategies employed by ROW Asset Management span many different styles – trend-following, carry/roll yield, relative value, mean reversion, time decay, and pattern recognition. The firm believes it has designed the investment process to be

Continued on Page 16

modular, with many layers of risk management. Consequently, ROWAM can and has produced custom investment solutions for institutional investors with particular needs.

ROW's investment philosophy is to combine quantitative discipline, market intuition, academic insight, and qualitative risk overlay to seek to capture the positive attributes of both the systematic and discretionary approaches to investment management. "We are a quant-first firm, but at the same time we are not blind to what is happening in the world," points out Jeff Weiser, the portfolio manager for all ROW investment products. Weiser's mandate is twofold – first, to manage the execution of model trades, and second, in rare instances, to seek to selectively reduce risk during market events/crises exogenous to the model's field of view.

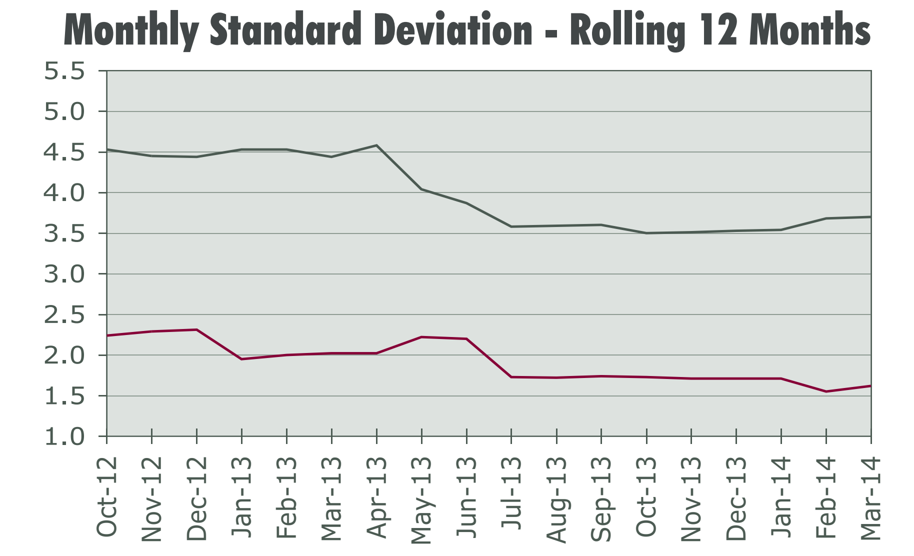

Figure 1

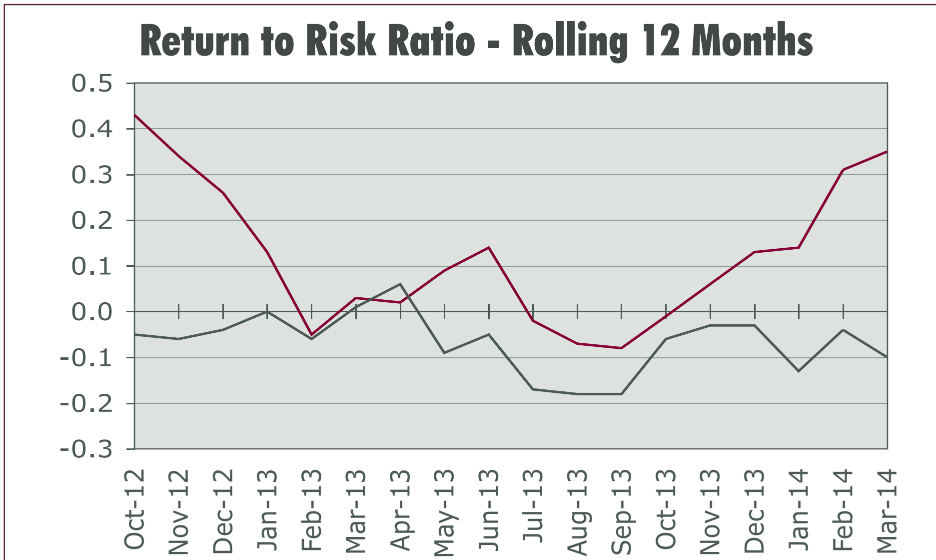

Figure 2

Trading Model Development

Intuition and experience play an important role in model development as well. Ryan O'Grady has been developing trading models since his days as a 17-year-old intern at Neuberger Berman, and has an understanding of the lifecycle of a model, and how different strategies interact. O'Grady states, "Conventional wisdom states that the profitability of a model fades over time. We think this is only partially true. Most models have some exposure to a market factor, and the performance generated by that exposure will be cyclical in nature. For example, trend-following models are 'out' right now, while shorter-term mean-reversion models are 'in'. The alpha component of a model is what fades over time – trade filtering, data preprocessing, etc. It is our job in research to produce new technology to stay out in front of the alpha decay, while looking for new market factors to add to the mix." Based on its view of model lifecycle, ROW does not believe in performance chasing its models. Instead, it seeks to balance exposure to different exploitable market factors, while continuously updating and revising the alpha components of each of its models.

ROW does not believe in large research staffs. Says O'Grady, "We get asked, how can you compete against a firm with 50 PhDs on staff, researching the same markets as you? The disconnect is that building models is not the same as curing a disease, or finding the Higgs boson. What we do is not science, because scientific theories are testable, whereas back-tested model performance is famously unreliable. We are applying quantitative methods to a belief system, and belief systems are not additive. We believe our greatest strength is craftsmanship – progressing from an idea, to an interaction of rules, to a risk-managed trading strategy. I would put our research development process up against anyone else's, big firm or small." To wit, a number of studies of large vs. small hedge fund performance show that smaller, younger firms outperform their large, mature rivals.

The craftsmanship process continues after a model goes live. The initial "polishing" of a new model typically takes a few months, during which time the model has a substantially reduced allocation relative to target. Says Weiser, "There is no substitute for running a model live, with real money, in real time. We learn so much in a new models' early days of live trading." After a model passes through the polishing period, it is still subject to periodic review and augmentation. But it is very uncommon for a model to be pulled from the lineup unless it is being replaced by a similar model that is believed to be superior. "We use the analogy of a soccer team – if your goalie is underperforming, you do not simply pull him from the game – you have to replace him." When evaluating model performance, the metric is how the model performed relative to other models that share its factor exposure.

ROW is of the view that the modular approach to research allows it to seamlessly augment and update its collection of models with the latest in academic and investment bank research. The team reviews 50-100 papers per month, does full write-ups on around 10, and of those, 3 to 5 are fully replicated. Often times, the stated goal of the paper is not germane to the assets or strategies traded at ROW, but some seemingly insignificant nugget of information will prove to be very valuable to a specific problem ROW is trying to solve.

Peer Group Comparison

In order to evaluate ROW's unique amalgam of quantitative and qualitative inputs used in its trading protocols, we've compared the output generated in terms of volatility and risk-adjusted returns for the ROW Diversified Program versus a peer group of 375 CTAs. All members of the peer group employ a technical approach to the trading of a diversified portfolio of futures markets and were extracted from The Barclay CTA Database.

In *Figure 1*, we compare the average monthly standard deviation on a rolling 12-month basis for ROW Diversified with the average results generated by its peer group. The time period utilized, November 2011 through March 2014, coincides with the inception of trading for ROW. As we can see from this chart, ROW's monthly standard deviation, when measured on a rolling 12-month basis, has averaged one-half the average level of volatility generated by its peer group.

In *Figure 2*, we compare the rolling 12-month risk-adjusted returns for ROW with the averages generated by its peer group. Risk-adjusted returns are calculated by dividing the 12-month rolling average of the monthly rates of return by the 12-month rolling average of the standard deviation. As we can see, in all the periods under consideration but one, ROW has been able to provide its investors with a higher risk-adjusted return than the averages generated by its peer group. Please note however that past results are not a predictor of future returns.

Academic Affiliations

To better maintain contact with the academic world, ROW has an affiliation with the UCLA Anderson finance department – O'Grady is a founding member of the Industry Advisory Board for the UCLA Anderson Master of Financial Engineering program. ROW hires interns from UCLA and other MFE programs in order to enhance its capabilities at the front lines of research. O'Grady and the research team can offload the replication tasks to interns, as investment experience is not required to duplicate the stated results of a paper. As a result, ROW principals are only reviewing papers that have been proven to be accurate. Seng Ung, now part of the ROW research team, started as an intern at ROW on the day they opened. Says O'Grady, "The first paper Seng wanted to replicate was an equilibrium exchange rate model, because it was something his thesis advisor was working on at UCLA. This type of model would not have flown at our previous shop, because it holds trades for long periods of time and thus cannot generate a high Sharpe ratio on its own. But it fit really well with other models we had in development." Many version updates later, this model is still in use today.

Future Plans

ROWAM's focus at the product development level is to seek to continue to enhance what it can offer to potential investors. Says O'Grady, "ROW Diversified is our best guess at what investors in the managed futures/CTA space are looking for. But investors are becoming increasingly knowledgeable about the strategies and market factors available in our space, and how some subset of those factors might be optimally beneficial to their portfolios." Several of ROW's investors have expressed interest in a "no-trend" version of ROW Diversified, with one investor seeding the idea with a small allocation in a managed account at the beginning of 2013. Others have looked at targeted exposure to FX and commodity carry, or selectively hedging existing FX exposure. "We want to be in a position to work with a potential investor and design a product that is optimal for their needs. Different subsets of ROW Diversified can provide very different return profiles, but they all share the same high liquidity and layered risk management as the flagship program," says O'Grady. ♦